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# Management of Government

## *Procurement*

A Study Team Report  
to the Task Force on Program Review







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**GOVERNMENT PROCUREMENT**

**"SPENDING SMARTER"**

A Study Team Report  
to the Task Force  
on Program Review

June, 1985





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## FOREWORD

The Task Force on Program Review was created in September 1984 with two major objectives - better service to the public and improved management of government programs. Recognizing the desirability of involving the private sector in the work of program review, assistance from national labour, business and professional organizations was sought. The response was immediate and generous. Each of these national organizations selected one of their members to serve in an advisory capacity. These public spirited citizens served without remuneration. Thus was formed the Private Sector Advisory Committee which has been responsible for reviewing and examining all of the work of program review.

The specific program reviews have been carried out by mixed study teams composed of a balance of private sector and public sector specialists, including representatives from provincial and municipal governments. Each study team was responsible for the review of a "family" of programs and it is the reports of these study teams that are published in this series. These study team reports represent consensus, including that of the Private Sector Advisory Committee, but not necessarily unanimity among study team members, or members of the Private Sector Advisory Committee, in all respects.

The review is unique in Canadian history. Never before has there been such broad representation from outside government in such a wide-ranging examination of government programs. The release of the work of the mixed study teams is a public acknowledgement of their extraordinarily valuable contribution to this difficult task.

Study teams reviewed existing evaluations and other available analyses and consulted with many hundreds of people and organizations. The teams split into smaller groups and consulted with interested persons in the private sector. There were also discussions with program recipients, provincial and municipal governments at all levels, from officials to cabinet ministers. Twenty provincial officials including three deputy ministers were members of various study teams.

The observations and options presented in these reports were made by the study teams. Some are subjective. That was necessary and appropriate considering that the review phase of the process was designed to be completed in a little more than a year. Each study team was given three months to carry out its work and to report. The urgent need for better and more responsive government required a fresh analysis of broad scope within a reasonable time frame.

There were several distinct stages in the review process. Terms of reference were drawn up for each study team. Study team leaders and members were appointed with assistance from the Private Sector Advisory Committee and the two Task Force Advisors: Mr. Darcy McKeough and Dr. Peter Meyboom. Mr. McKeough, a business leader and former Ontario cabinet minister, provided private sector liaison while Dr. Meyboom, a senior Treasury Board official, was responsible for liaison with the public sector. The private sector members of the study teams served without remuneration save for a nominal per diem where labour representatives were involved.

After completing their work, the study teams discussed their reports with the Private Sector Advisory Committee. Subsequently, their findings were submitted to the Task Force led by the Deputy Prime Minister, the Honourable Erik Nielsen. The other members are the Honourable Michael Wilson, Minister of Finance, the Honourable John Crosbie, Minister of Justice, and the President of the Treasury Board, the Honourable Robert de Cotret.

The study team reports represent the first orderly step toward cabinet discussion. These reports outline options as seen by the respective study teams and present them in the form of recommendations to the Task Force for consideration. The reports of the study teams do not represent government policy nor are they decisions of the government. The reports provide the basis for discussion of the wide array of programs which exist throughout government. They provide government with a valuable tool in the decision-making process.

Taken together, these volumes illustrate the magnitude and character of the current array of government programs and present options either to change the nature of these programs or to improve their management. Some decisions were announced with the May budget speech, and some subsequently. As the Minister of Finance noted in the May



budget speech, the time horizon for implementation of some measures is the end of the decade. Cabinet will judge the pace and extent of such change.

These study team reports are being released in the hope that they will help Canadians understand better the complexity of the issues involved and some of the optional solutions. They are also released with sincere acknowledgement to all of those who have given so generously of their time and talent to make this review possible.





## **TERMS OF REFERENCE**

To establish the terms of reference for the study team reporting to the Ministerial Task Force on Program Review concerning the federal government's procurement policies, processes and programs.

Federal government procurement of goods and services is big business. The public sector in Canada (at all levels) purchases more than \$50 billion in goods and services annually, of which more than \$6 billion is procured by the Department of Supply and Services (DSS), a similar amount by departments and agencies, and a further \$9 billion by Crown corporations. The procurement process involves to some degree or other virtually every major organization of the federal government. The economic effects of the purchases of the federal government reach all parts of the country and extend into all sectors of the Canadian national economy.

Government contracting policy derives from the Financial Administration Act and other acts of Parliament and is enunciated in Treasury Board Regulations and Policy Directives. The central feature of the government procurement process is the use of a common service agent (Department of Supply and Services, hereinafter, DSS) to purchase nearly all its goods and an important portion of its services. The Supply Program Objective as found in the Main Estimates is "To acquire and provide goods and/or services required by departments and agencies, taking into account the contribution of Supply to the realization of national objectives, and to provide services for the disposal of Crown-owned materiel, all in the most economical manner". The principal elements of the statutory framework within which the Supply Program operates are the DSS Act, DPA and the Surplus Crown Assets Act. A number of Orders-in-Council also apply as well as several Memoranda of Understanding. With respect to procurement, DSS and other departments are governed by regulatory, policy and procedural controls to ensure conformance with national objectives, prudence and probity and fairness and equity in dealing with suppliers. A small number of programs which are related in one way or another to government procurement are an important part of the system. Examples of the latter include the "make or buy" policies and programs respecting R&D or the "in-house" produced services ranging from printing to audit services, management consulting and translation.

A second common service agent, Public Works Canada, performs similar functions in respect of real property management. The governing policy, procedures and activities of Public Works Canada are presently under review by the study team on real property management and hence, are outside the scope of this review.

The study team will seek advice and provide recommendations on improvements to the efficiency and effectiveness of current government procurement policies, processes and programs. In examining government procurement, the study team will bear in mind the objectives of the Ministerial Task Force on Program Review and in particular its interest in making the procurement system simpler, more understandable and more accessible in order to provide better service, less red tape and greater efficiency.

The review will focus primarily on the procurement activities of federal departments and agencies. To the extent only that meaningful observations and conclusions can be drawn in a 90-day period, the study team may be able to inform itself about selected aspects of the procurement activities of the larger Crown corporations.

With regard to its specific issue focus, the study team will provide a report with its observations and advice in respect of the three major themes detailed below:

- a. Better Management of the Procurement System - whether there is potential for significant service improvement to client departments as a result of achieving greater overall operating efficiency or reducing "red tape"; whether greater observance of probity and prudence is possible; whether there is potential for greater economy or financial savings through increased contracting out to the private sector of any of the wide range of centralized or special purpose services presently provided internal to a department or from one department to a client group of others. In these areas, the study team may address specific questions like the problems faced by operating departments, such as DND and MOT in their interaction with policy departments and common service agencies; opportunity to effect better expenditure management procedures (to reduce what some perceive to be imprudent year-end spending);



whether organizational rearrangements would be beneficial, such as privatization of certain in-house-produced services; or the desirability of increasing or reducing (as the case may be) the ability of client departments to contract for goods or services independent of DSS.

- b. The Potential for Reduction of Barriers to Government Market Access - whether, for example, private suppliers to government (large or small, central or regional) are faced with a procurement system that is unnecessarily complex, costly or centralized in its activity, thereby inhibiting fair and equitable access to the government market. In this area, the team may address the relative cost of doing business with government, the question of whether government specifications may be too demanding or unrealistic in a commercial sense, the existing policy on competitive tendering (and its impact on various sectors, large and small business and the regions) or the question of whether more regional or "on-the-spot" purchasing could or should be undertaken by DSS and its client departments.
- c. The Use of Procurement as a Lever for the Attainment of National Objectives - modern day governments have used, and continue to use, government procurement as an instrument of national economic and social policy. Government policy has evolved to a point where the focus is placed not only on the procurement of best value goods and services but also on the use of federal purchasing power as a lever to effect other social and economic objectives - among them job creation, enhancement of technological capability, access to foreign markets and industrial and regional development. These other objectives may involve significant trade-offs and recently there has been considerable work in attempting to define both what they mean in operational terms and to implement strategies to achieve them. The study team will review the present situation in order to advise on:
  - 1. the extent to which the procurement system has supported (and can continue to support) these various objectives;

2. the nature of operational conflicts and inefficiencies (if any) arising from an attempt to procure lowest-cost goods and services while furthering other related objectives; and
3. the potential for and desirability of clarifying the policies and concomitant roles and responsibilities of the major players (esp. DRIE and DSS) in this process.

As a related but separate matter, the use of procurement for national defence - security reasons will be examined. The Department of National Defence (DND) accounts for a major portion of all federal procurement spending (exclusive of Crown corporations) and procurement policy is closely related to the attainment of national security objectives as well. Under the Defence Production Act, DSS has a significant role to play with respect to the organization of industry for Defence. The study team will focus on whether and how defence-related procurement policy could be shaped to promote the definition, development and maintenance, over the long term, of a domestic industrial capacity to supply certain products (as may be identified by DND) of strategic importance to defending the nation. Within a time frame of 90 days, and given that DND has just commenced upon an exercise to define a defence industrial base (expected to take two years), the output of this examination will be limited.

In undertaking this work, the team will rely heavily on both the views of DND, DSS, DRIE, and on any recent study reports pertinent to this matter.

In conducting its examination, the study team will consult as appropriate with public and private sector representatives and take full account of any ongoing activities and initiatives that are relevant to government procurement. The team is expected to indicate to Ministers under the three headings detailed in a previous paragraph:

- a. where serious problems may exist in the system as seen from outside as well as within government;
- b. what course or courses of follow-up action are open to further evaluate or remedy these problems, including, an indication of -

1. possible changes in procurement management policies or practices,
  2. legislative amendments that could be required to implement any changes,
  3. groups of procurement functions that could be privatized,
  4. possible changes in the organization of government for the management of the procurement system; and
- c. where dollars might be saved in the procurement system or where efficiencies (doing more for the same dollars) might be gained.

In conducting this review, the study team will be mindful of the distinctions in policy and process that are presently applied to:

- a. major Crown procurements of goods whose value is in excess of \$100 million;
- b. goods procurements of less than \$100 million at various thresholds in value; and
- c. the procurement of services at various thresholds of value.

The advice and recommendations of the study team will take account of the differing treatment presently applied to these various categories of procurement activity.

### **Linkage with Other Program Reviews**

Cutting horizontally across government activities as this study does, it will no doubt deal with issues covered by other program reviews or individual departmental initiatives. The team will identify for the Ministerial Task Force in its detailed work plan any procurement-related issues or programs that have been reviewed by previous Task Force teams or are in the process of being reviewed by Ministers through other means. In general, the study team will not focus its attention on such issues or programs, unless it is the judgment of the team that important procurement-related questions were not addressed in the initial review and that a "second opinion" would be useful for Ministers.

As noted above, any matters of this type would be specifically highlighted in the study team's detailed work plan, or amendments thereto, as such issues or programs present themselves.



## **Composition of the Study Team**

The study team will be led by a senior executive from the private sector and a deputy team leader from the public sector. The team leader and deputy will report to both the Public Sector Advisor and the Private Sector Liaison Advisor serving the Chairman of the Task Force and will consult with the Private Sector Advisory Committee. The team leader and deputy team leader will be supported by four government executives, five private sector representatives and other public sector officials seconded to provide professional support to the team. The team, or its leader and deputy team leader, will meet with the Public Sector Advisor and Private Sector Liaison Advisor as needed.

## **Work Plan**

The study team will submit for consideration by the Ministerial Task Force a detailed work plan reflecting these terms of reference.

## **Access to Information and Data Sources**

The study team will have access to evaluations, audits, reviews and reports on procurement activities prepared over the past several years, as well as any other existing information and data from central agencies and service and program organizations. A review of this information will be conducted by the study team and if additional data are required, central agencies and service and program departments will be requested by the study team, on behalf of the Ministerial Task Force, to collect such data.

These terms of reference have been reviewed by the Deputy Ministers of Supply and Services, National Defence, Transport, Regional Industrial Expansion and International Trade and by the Secretary of the Treasury Board.

## **Reporting Schedule**

The study team is expected to report its initial findings to the Ministerial Task Force on June 28, 1985. It will provide regular reports, including a written progress report, on approximately May 15, 1985.

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## INTRODUCTION

This is the final report of the Study Team on Government Procurement. The team commenced work under its approved Terms of Reference on April 4, 1985 and completed its review on June 21, 1985.

In our review of government procurement we were struck by two things -- the staggering complexity of a system that buys over \$9 billion per year in goods and services, including everything from paper clips to battleships, and the management determination to make it work.

We began this review with the idea that government could "spend smarter" in its procurements and save money in the way it goes about procurement, getting better value for the dollars it spends. Our views on this have not changed, and we offer proposals designed to improve the system. At the same time, in the midst of the criticisms that follow, we would be remiss if we did not advise Task Force members at the outset that the system in place is working. Generally, we need to renovate the house, and, in the case of our contracting-out proposals, reduce its size. But we do not need to build a new one.

Following a general overview, this report is structured around five theme chapters, starting with Better Management (Section 1) and ending with the Procurement Lever (Section 5). Separate chapters on Competition, Contracting Out and Fairness and Accessibility to Suppliers are also included.

Unlike the reports of most other study teams, the discussion in this report focuses on policy and process, not programs. Rather than 100-200 program assessments, this report has been reduced to a number of issue papers. Hence, we have condensed the options into about 20 groupings. In most cases, we have been able to identify the key problem and provide a road map to a preferred solution.

The team has received excellent cooperation from the over 200 senior public and private sector individuals along with their staff consulted in the preparation of this report.



## OVERVIEW - "SPENDING SMARTER"

The study team's fundamental conclusions are that the government can spend smarter by:

- **better managing the system in place**, both on low and high dollar value items (Section 1). Savings of \$50 million to \$75 million are possible on low dollar acquisition, and for high dollar items, the risk of cost overruns can be minimized on the \$27 billion of major Crown projects during the next ten years;
- **increasing competitive tendering** when buying goods and services, when it makes sense to do so (Section 2). Increasing competed contracts from current levels of about 45 to 55 per cent over the next few years could amount to economies of more than \$100 million a year; and
- **promoting contracting-out initiatives** (Section 3). Although savings cannot be accurately targeted, the potential is substantial - \$200 million - it could be more, depending on the scope and vigour with which such a policy is applied;
- **focusing on industrial and regional development** for major capital equipment acquisitions (estimated at \$27 billion over the next ten years) would result in long-term, high-quality jobs, as well as improved international competitiveness of our industry (Section 5).

From a better management perspective, the federal procurement system, with the Department of Supply and Services (DSS) as the common service organization for goods procurement, has a good service record. Revenue dependency is a useful reminder of the costs involved. No scandals have occurred with major capital equipment purchases. Moreover, DSS has supported the use of procurement to enhance regional and small business opportunities. However, there is still room for improvement.

The efficiency of low dollar value goods procurement - which represents 90 per cent of government transactions, but only 20 per cent of the value of DSS purchases - can be improved. Of the \$1.4 billion in low dollar purchases, the procurement costs exceed 10 per cent (\$150 million) and these transactions need to be managed better to reduce costs. Achievable targets of a 15 per cent cut in process costs and a 2.5 to 5 per cent reduction in product costs would save \$35 million to \$70 million. This system could



also be streamlined, and to be effective, DSS and departments must develop a closer working relationship. DSS is automating the procurement system during the next several years, and if properly focused on low dollar value transactions, significant savings could result.

Different problems occur in high dollar value procurements. Insufficient attention has been paid to human resource planning and mandate overlaps exist among the various departments on major Crown projects (those with budgets of over \$100 million). As the number and complexity of major crown projects grow, cost overruns could happen unless mandates are clarified and better support and negotiating skills are developed. In addition, departments are prevented from carrying forward unspent funds from one fiscal year to the next. This may provide an unintended incentive for imprudent year-end spending.

The team found that pricing and charging strategies in support of DSS revenue dependency are inefficient and require revision. Another \$5 million in savings are possible by changes to revenue dependency and privatization of the disposal system. Section 1 addresses the better management issue.

Competition in contracting has not been adequately addressed. Only about 45 per cent of all contracts for goods and services were competed last year. If 20 per cent of the commodities and services that are now not competed were moved to the competed side of the ledger (to increase the competition level to 55 per cent) savings of \$100 million could be realized. However, savings in product costs will be difficult to measure and cannot be realized without better departmental strategies and data, as well as improved management commitment to competitive tendering (Section 2).

It is the view of the study team that new initiatives are needed for contracting out services. Existing "make or buy" policies for electronic data processing (EDP) and science and technology are not working and need to be revitalized. Too much is being done in-house. The DSS "make or buy" policy is working, but even here room for improvement exists. A wide range of opportunities for contracting out to the private sector in other areas could produce:

- savings from improved productivity; and
- more business for the private sector.

In the opinion of the study team, some areas that should be subjected to the test of contracting out include building maintenance, inspection services, equipment repair and maintenance. The U.S. government's contracting out policy saves more than 20 per cent a year, even though only half of the services considered for contracting out were finally supplied by the private sector. When challenged, the public sector was able to pare costs and compete successfully in half the cases and savings resulted from improved productivity whether done in-house or out. In Canada, the team estimates that if 15 per cent of in-house services were contracted out, at savings of 15 per cent, at least \$200 million could be saved.

Such a program would need to be implemented carefully, and the issue papers note the pitfalls. However, although Canada's industrial infrastructure is comparatively small, there are areas for which private sector expertise is available and the work can be contracted out. In other cases, it may take time for this expertise to develop.

The maintenance of an accessible and fair procurement system is a constant challenge to DSS, but it has been given lower priority in other departments. A centralized registration system for suppliers interested in selling to government is desirable and improvements are possible in this area. Small business is receiving its fair share of procurement contracts from DSS, but other departments do not collect data on their level of contracting to small business.

In view of the data available to the study team, there may be room to increase the share in federal purchasing of products from Atlantic and Western Canada. But because government data are limited, the study team cannot suggest major shifts in public policy. DSS is actively pursuing increased regionalization of its purchases and, in the view of the study team, should be encouraged to continue. At the same time, departments have not taken commensurate steps and should be directed to do so. Finally, particular small business and regional irritants related to bidding procedures and access to information need to be remedied (Section 4).

Using procurement as a lever has generated considerable discussion. It is generally agreed that procurement should be used as a lever, but if multiple objectives are considered, little will be accomplished. We have counted 40 different national objectives scattered among various authoritative documents. Clearly, some focus is needed. The study team believes that the primary national objective for major procurements should be long-term industrial and regional development that enhances Canada's international competitiveness.

About 50 per cent of what the government buys is made in Canada. However, the percentage is lower for major procurements, which are usually bought "off-the-shelf" from foreign suppliers. Even a minor shift in this figure would produce high-quality, long-lasting jobs. By focusing the expected expenditure of \$27 billion of major capital equipment over the next ten years on the primary objective of industrial/regional development that enhances competitiveness, the payoff should be significantly better than that of the past ten years; although such results will not occur overnight. Since Ministers do not have a ten-year capital expenditure budget or an investment plan against which to organize these procurements, it is too late to invest in the necessary R&D to produce the innovative products that are the key to selling in Canada and abroad. Therefore, the study team suggests reform of the organization of major procurements - to view them as an investment, not simply a "buy".

### **Impact of Options on Departments and Agencies**

The impact of our options would not radically alter the roles and responsibilities of the many departments and agencies associated with the procurement system. However, these options would imply certain changes in management priority and departmental orientation toward procurement activity. The highlights are outlined below.

The study team recommends to the Task Force that the government consider having DSS place a relatively greater focus on its common service agency responsibility while balancing this with a less proactive role in the identification of national benefit opportunities associated with major Crown projects. Instead of increased delegation of low dollar value goods procurements to departments proposed by DSS, we would propose a retention of this responsibility and strengthening, wherever possible, the



emphasis placed on competitive tendering. Although we believe DSS participation to be essential in the consideration of major Crown project planning, our options reflect a preference for increased DRIE, TC and DND responsibility in this area.

The Study team is of the view that DSS, in furthering its common service agency role should continue its management efforts to improve the system in place. Our suggested options highlight the need for greater attention to human resource planning and development; the reduction of overhead costs associated with "fees" billing; the early application of full cost recovery on (for example) audit and consulting services; the improvement of statistical information; the review (with Treasury Board) of relevant "make-buy" policies; and, the further examination of specific ways to enhance fairness and accessibility while promoting federal-provincial cooperative procurement.

As noted above, an early resolution of the overlap and confusion associated with procurement-related national objectives is necessary in the view of the study team. Combined with our view that industrial and regional development should be the primary focus, options would enhance the role of **DRIE** in:

- developing procurement-related industrial and regional policies;
- co-ordinating and focusing departmental efforts to this end;
- improving consultation with industry early in the acquisition cycle; and
- co-ordinating research and development support to assist Canadian firms in prepositioning themselves to bid on major federal projects.

Our options would charge **Transport Canada** and **DND** with assisting DSS and DRIE in the preparation of an annual strategic acquisition plan that would reflect the matters addressed previously. This would entail among other things the development of departmental acquisition plans in sufficient scope, detail and time frame to be useful for ministerial decision-making. Evidence placed before the team indicates that both departments are capable of this at present.

The **Treasury Board** role would not change. However, the options we are recommending to the Task Force for the

government's consideration would imply a reorientation of certain management priorities. Treasury Board, under these options, would place less emphasis on review and approval of contracts that have been competed (and where government and project approval requirements have been met) yet at the same time the Board would take a more proactive role in setting competition targets for certain types of service contracts and ensuring that appropriate control mechanisms are in place for those identified departments where contracting is poorly managed. In addition, the Board would devote greater attention to personnel and administrative constraints associated with the management of major Crown projects and would be charged with the review of numerous administrative policies and practices where significant problems have been identified.

A number of other **departments and agencies** would be charged with specific investigations on matters within their mandates. In addition, all regionalized, operating departments would be required to review their delegation of requisitioning authority to their regional offices with a view to increasing regional procurement where appropriate.

Much can be done to spend smarter and more economically in the procurement of goods and services. Changes in policies and processes will be required, and if implemented without red tape, they will improve the infrastructure already in place. Increased competition (both in-house and when buying from the private sector) can make our procurement dollars go farther. Greater reliance on, and communication with, the private sector can put Canadian industry in a position to bid successfully on major projects. We also believe that government is now well placed to investigate the potential for reducing internal costs and promoting private sector capability through the investigation and development of a general contracting-out initiative. We believe these goals are worthwhile and with some investment of effort now, will result in significant benefits over the longer term.

## SECTION 1 - BETTER MANAGEMENT OF THE PROCUREMENT SYSTEM

### OVERVIEW

#### INTRODUCTION

Management of the procurement system has had a high profile in government for over 20 years. From the 1962 Glassco Commission, through the creation of DSS, to the Lambert Commission, to the DSS change to revenue dependency and the recent merging of the Supply and Service Administrations, successive governments have placed the management of procurement under constant review. This attention to better management is not misplaced.

Government procurement is big business and it needs to be well managed. DSS buys some \$7 billion worth of goods and services each year while departments and agencies purchase another \$2 billion. These procurements, in addition to providing support to government operations, affect every industry and service sector in every region of Canada.

In reviewing the management of the system, the study team reviewed the broad range of supply spectrum functions, from initial definition and specification of needs, through acquisition and use and ultimately to disposal. Our primary focus has been on acquisition by:

- DSS for goods and large value repair and overhaul and professional types of service contracts,
- individual departments of personal, professional, and blue-collar service contracts.

The acquisition process contains an inherent tension that is necessary for the overall system to work effectively. This tension is between the departmental user/buyers who want exactly what they say they want now and:

- constraints designed to ensure prudence and probity; and
- policy objectives of ensuring best value and fairness through competition.

It is this tension that leads to conflicts between operating departments, TB and DSS. To improve the effectiveness of the system, it is the view of the study team that ways of



streamlining policies and procedures, and improving human resources and large capital acquisition management are required to ensure that cost, delivery and quality requirements are met while ensuring prudence and probity.

Within the scope of this study, the workings of the process were not examined in detail. Nevertheless, a number of areas, both inside and outside DSS, were identified as capable of improving the effectiveness of the procurement system. These fall into two categories:

- basic rules, policy, and procedures; and
- human resource and major capital project management.

Rules, policy, and procedures focus primarily on lower dollar value transactions. Here management must focus on ways to streamline the process and to reduce both the paperwork and time required to obtain standard items. This is particularly important because close to 90 per cent of the DSS transactions are for less than \$10,000, accounting for less than 10 per cent of total expenditures. Because of the large number of such transactions, client satisfaction and successful supplier relations can be substantially affected by how well the process is managed. Cost savings can accrue from improvements in process efficiency and product price reductions.

The human resource and major capital project management categories focus on large procurements ranging from \$2 million to several billions of dollars. Unique, higher dollar value goods or project procurements depend on competent contract definition, negotiation and administration capabilities to ensure that best dollar value is obtained.

A small percentage reduction in the negotiated price for a major procurement will offset contract negotiation costs many times. For these types of goods, better management requires improved contracting skills to develop the lowest product cost. Best value for money will be obtained through the development of qualified and experienced procurement specialists able to deal with sophisticated suppliers on an equal footing.

## **OBSERVATIONS RESPECTING RULES, POLICY, OR PROCEDURAL ADJUSTMENTS**

Highlights of our observations include the following:

- there is no comprehensive approach to manage low dollar value transactions, even though they involve about 20 per cent of the total value of goods and services bought by DSS and departments. A 10 to 15 per cent reduction in the cost of procurement for these goods would result in annual savings of \$15 to \$20 million;
- standing offer purchasing - an arrangement where DSS establishes a price with suppliers once a year and then delegates purchasing authority to departments - is poorly managed. Standing offers represent about \$1 billion of purchasing volume. Price reductions in the 2.5 to 5 per cent range appear attainable through negotiated discounts and savings of \$25 to \$50 million would result;
- the delegation of \$10,000 contracting authority to departments recently proposed by DSS (from the current \$500) would have major negative effects on the effectiveness of low dollar value purchasing and added costs would be incurred. No valid basis for proceeding with this proposed action is apparent;
- other departments should, however, delegate more of their internal requisitioning authority to their regional operations in order to use DSS regional offices more effectively;
- current DSS pricing and charging strategies in support of revenue dependency are cumbersome, consume an unnecessarily high degree of DSS and departmental resources, and are not efficient. Cost savings of at least \$3 million can be attained;
- overhead burdens and time delays associated with TB submission approvals are not excessive but do warrant reduction, especially for the better performing departments. Such a customized "deregulation" could also offer an incentive for overall improved contracting performance across government;
- management of both warehousing and disposal could be improved, particularly by continued privatizing of warehousing and extending this to disposal

services, with an estimated cost benefit of \$2 million;

- additional management attention is required to resolve long-standing questions and irritants between government and industry concerning standard terms and conditions in government contracting.

#### **OBSERVATIONS RESPECTING HUMAN RESOURCE AND MAJOR CROWN PROJECT MANAGEMENT**

As noted earlier, substantial economies are available on high value, technology intensive procurements provided that product costs are kept to lowest reasonable levels. In the judgment of the team, such performance is dependent upon two factors:

- ensuring that the management of those procurements is charged to the most capable and best trained people available; and
- ensuring the presence of sufficient organizational support.

Our most significant observations are that:

- action is required to ensure that procurement of the \$27 billion in major Crown projects over the next ten years is effectively managed;
- senior officials of DSS, Treasury Board and the major client departments have expressed concern over the levels of experience and expertise presently resident in the procurement directorates of DSS. If voluntary and mandatory retirement forecasts are realized, DSS will experience further significant losses of their best qualified people over the next several years;
- DSS has not taken sufficient advantage of training and development programs as suggested by Treasury Board in 1980;
- the management and administration of major Crown projects is complicated by overlapping departmental responsibilities, inflexible staffing rules, inadequate corporate memory of lessons learned and insufficient allocation of expert resources to the early stages of project identification and definition;
- inflexibilities in the government budgeting system pose a cash management problem for departments with major Crown projects and may contribute to imprudent year-end spending; and



- the existing major Crown project contracting policy currently being implemented by DSS is adequate.

## REMEDIAL ACTION

Where the team was aware of specific remedial action that could solve an identified problem, that action was suggested. At the same time, we do not believe that all the problems we have identified can be solved in less than three months by this team. In some cases, the Task Force will be served better by charging responsible ministers to review a given situation in depth, develop an action plan, and report back with more specific options. Much of the value of our review of procurement management has been in advising ministers where best to look.

## OPTIONS

The study team recommends to the Task Force that the government consider developing action plans and subsequent Reports to Ministers to:

- reduce costs and time delays of low dollar value goods procurement with particular attention to, among other things, standing offer procurement;
- improve human resource management, particularly to develop the experience and skills associated with complex, high-value goods procurements; and
- reduce paper burden, personnel, and costs of the revenue dependency system.

In the view of the study team the government should also consider:

- Having additional requisitioning authority delegated by departments to their regional and local offices;
- Commercializing disposal operations, and accelerate efforts to revise and improve standard terms and conditions of government contracts; but not proceed with plans to increase contracting authority in departments from \$500 to \$10,000;
- Taking steps to selectively deregulate the TB contract approvals process for contracts that have been awarded through competition and where government program and project approvals have been met.

### **In management of Major Crown Projects:**

- Establishing a central point in the TBS for the allocation of PYs to such projects along with the establishment of an appropriate advisory service;
- Resolving the present overlap of departmental responsibilities respecting MCP management immediately; and
- Eliminating constraints to productive management of MCPs, including those associated with hiring of skilled staff, better joint administration services, the resolution of budgetary and cash management problems, and the allocation of sufficient PYs to the early stages of project identification and project definition.

## **THE ROLE OF THE COMMON SERVICE ORGANIZATION**

### **PURPOSE**

To assess the role and operations of government common service organizations (CSOs), with specific reference to the Department of Supply and Services (DSS), to determine whether:

- they are the cause of cost and time delays, as reported by the Auditor General's 1982 Report on the top ten constraints to effective management;
- the government should increase consolidation of common services and whether CSO activities should remain centralized (mandatory) or decentralized (voluntary); and
- the revenue dependency system can be made more effective.

### **BACKGROUND**

The Department of Public Works (DPW) and DSS were set up as common service organizations and are responsible for provisioning accommodation, materiel and some services. Other services are provided by the Government Telecommunications Agency (GTA) of the Department of Communications, and the Translation Bureau of the Secretary of State. In addition, the Public Service Commission (PSC), with its responsibility for staffing and training, also provides a common service within the federal government.

Federal government common service organizations currently provide goods or services totalling \$9 billion, with an estimated work-force allocation of 22,286 person-years and combined operating expenses of \$1.9 billion. The DSS component is 10,536 person-years and \$758 million in operating expenses.

The Glassco Royal Commission stressed the need to organize services internal to government - called input services - and called for a greater degree of professionalism in the provision of common services. The Commission promoted a monopoly concept for procurement of goods because of economic benefits of scale and increased professionalism (since referred to in government jargon as prudence and probity). The Glassco preference on common service structure was implemented in 1969 with the creation of DSS.



The Lambert Commission saw the issue from a different vantage point. Because the Glassco Commission led to streamlining delivery of input services to federal departments and agencies, the Lambert Commission was more preoccupied with clarifying the role to be played by, and general policy that should govern, common service agencies. The Commission found that all agencies providing input services to federal government departments and agencies were in the same business and therefore should be governed by a common policy. Lambert distinguished the role of common services from that of the client department, noting that the latter are responsible for the "what, where and when" of procurement, and common services, such as DSS, for the "how". Lambert further supported full costing for common services and the selective application of revenue dependency.

In September 1982, Treasury Board (TB) issued new rules (Chapter 303) on common services policy to resolve uncertainties noted by royal commissioners, parliamentary committees and the Auditor General about the roles, goals and accountability of common service organizations. Such clarification was necessary to improve relations between common service organizations and their clients based on an understanding of each other's responsibilities and duties. With reference to DSS, this directive has not been completely successful because the "what, where and when" and the "how" cannot be completely separated.

DSS derives its mandate from:

- The Department of Supply and Services Act: "The Minister shall ... plan and organize the provision of materiel and related services to departments"; and
- The Treasury Board of Canada: Administrative Policy Manual (Chapter 303, Common Services Policy).  
"Common service organizations shall be responsible for determining how services will be provided to meet the needs of clients. Such organizations therefore are responsible for the process of acquisition, which includes the tendering and contracting process, as well as the application of socio-economic and 'make or buy' decisions".

In the Administrative Policy Manual, there are three categories of common services:

- mandatory: a service provided to clients who, to the extent they require the service, must obtain it from a designated common service organization and no other source;
- optional: a service which clients may obtain from a designated common service organization or from another supplier; and
- right of first refusal: a service where clients must give a designated common service organization reasonable opportunity to make an offer to supply the service.

DSS supplies the following services to departments and agencies:

- professional: related to management consulting and audit;
- financial: government banking and accounting, financial contract and accounts payable services;
- personnel: compensation (pay and pension) and government-wide personnel systems;
- contracting: encompassing most of the supply activities; and
- communications: including printing and publishing, expositions, video and photographic services.

## **ASSESSMENT**

In looking at the issues to be addressed, the discussion will be broken down as follows:

- the Auditor General's 1982 Report and the role of common service organizations;
- reviewing the centralization and decentralization of common services; and
- revenue dependency and the common service organizations.

The Auditor General's 1982 Report on the top ten roadblocks to productive management listed two that were procurement-related: cost and time delays, and budgeting constraints with respect to major capital acquisitions. The first is addressed here, and the latter was noted earlier.

The Auditor General's Report reflected the views of senior public and private sector managers about the era of specialization in public sector management (what has been called "functional imperialism"). Every specialized common

service function - property management, supply management, financial management, personnel management, and audit and evaluation, to name just a few, became the object of intensive new program development with rules, rules and more rules.

The fundamental responsibilities of common service organizations, endorsed by Glassco, are:

- economy and efficiency in operations;
- fairness and equity to suppliers;
- sensitivity and responsiveness to client needs;
- prudence and probity in the provision of services;  
and
- effective contribution to national objectives.

In measuring DSS's effectiveness as a CSO against these criteria, it should be noted that many of the objectives are of primary importance to Cabinet. Although DSS exists to provide a service to client departments, its first duty is to carry out the responsibilities assigned by the government. These include encouraging more competition, conducting more business in the regions or assisting small business, and sourcing from new suppliers. In these areas, DSS's client is Cabinet. The time and cost delays in procuring goods by DSS compared to private sector procurement are largely a result of these government objectives. However, these delays can be reduced, particularly for low dollar value procurements.

The Lambert Commission recommended further consolidation of certain common services, specifically translation and telephone services, within DSS. PSC training programs, in view of the study team, could be added to the list. Some small savings may be possible through further consolidation of these common service functions.

In the view of the study team, however, there are valid arguments to be made against such consolidation. At first glance, it would appear that because providing telephone advice is a procurement function, this activity should be consolidated. However, the Department of Communications (DOC) is developing expertise in office telecommunications systems and is providing an advisory function to client departments. This added service, and its growing importance, argue in favour of leaving this service in DOC.



The PSC's training activities are still in the developmental stage and any organizational change could jeopardize effective management of this function.

A more effective way to reduce costs associated with the operations of common service organizations, the study team believes, could be to place them, where appropriate, on full cost recovery. Both GTA and the PSC staff development activities are financed by revolving funds with direct costs of operations offset by revenues gained charging for services. These common service organizations do not include in their rates the costs of corporate services (e.g., personnel, finance, administration) provided by the departments in which they are housed. The Translation Bureau is funded by appropriation but employs a form of shadow billing to inform clients of the services provided to them.

The PSC staff development activities and GTA operations are subject to the discipline of cost recovery and only an incremental benefit would be gained from requiring them to cover the departmental corporate costs. Further cost recovery for GTA, leading to increases in rates may, in the view of the study team, discourage clients from taking advantage of advisory services on how to adapt to the office technology and communications environment of the future. Considering the infancy of PSC staff development activities, it appears appropriate to defer steps toward greater cost recovery until the function is further developed.

The Translation Bureau is not exposed to the cost discipline of revenue dependency which precludes it from making informed "make or buy" decisions. The cost of implementing revenue dependency must be weighed, but this is not a major factor in respect to the Translation Bureau. The current system employed to track costs and shadow bill clients can be used as the basis of a system of full revenue dependency.

Glassco and Lambert advocated a monopoly position for CSOs mainly for economic reasons. Changing technologies may challenge the notion that costs can only be reduced through consolidation. For example, new laser printing technology may allow departments to do printing for less cost than DSS, thus raising the question whether DSS should continue to provide this service as a monopoly. The answer partly depends upon whether the service could be contracted out, and on whether the common service organization or the

department is better able to implement the contracting out policy. Since DSS is on full cost recovery, it is better equipped to implement a "make or buy" policy.

As a general rule, DSS mandatory services should remain as they are, but there may be exceptions. For example, DSS's "make or buy" policy for specific communications services may no longer be effective because the level of buying is no longer increasing and economies of scale no longer apply. In such a case, the study team suggests to the Task Force that the government consider a review of the mandatory nature of the DSS service. However, before putting the service on a non-mandatory basis, certain conditions must be met. Departments must be able to implement a full revenue dependency system to demonstrate that they can provide the service more economically than DSS.

In the case of some services, the savings to government arising from the consolidation of purchasing power are particularly important because of the size and unique requirement of the government market. For example, if translation services were to be delegated to departments (voluntarily), the resulting competition among various departments for that same service may lead to overall increases in government costs. For this reason, the study team proposes that translation services continue as a mandatory service provided by the Secretary of State.

The concept of revenue dependency entails the recovery of all costs incurred in providing services to customer departments and agencies through charges to customers. Charges set by DSS are approved annually by Treasury Board after presentation to the Common Service Review Board.

The basic principles of revenue dependency require that:

- all activities performed on behalf of clients should generally be subject to some form of charge;
- the rate structure should be simple to administer and its underlying rationale and workings easy to understand for clients;
- the rate structure should reflect the level of effort expended in providing the various services, and thus be seen to be equitable from the client's perspective; and

- the rate structure should favour the application of continuing downward pressure on both product and resource costs.

Current DSS pricing and charging strategies, in support of revenue dependency, require issuing up to 160,000 invoices a month (some weekly, and some monthly) detailing the goods or services procured and the level of service charged. Many hours of computer processing are required to produce invoices. In DSS, it is estimated that the equivalent of 80 person-years are involved and that the number is at least matched in client departments.

It is the view of the study team that a billing system in which invoices are prepared for each purchase, based on its value, is not efficient.

The revenue dependency system implemented by DSS contains disincentives which discourage certain activities necessary to fulfil supply management responsibilities. Proper supply management requires personnel to achieve the lowest possible product cost through competitive tendering and firm negotiations with suppliers. Since the current DSS rate structure does not permit recovery of the additional costs associated with these activities, such activities may contribute to increased operating costs and may reduce revenues. Current DSS charging methods, therefore, occasionally lead to inappropriate trade-offs between product and resource costs.

The study team would suggest that DSS change its pricing and charging arrangements. For example, DSS could develop an annual contract with each of its customers. The contract would specify each acquisition service and the appropriate fee to be charged for a selected volume of business. It would provide for a fee scale should the forecasted business volume increase or decrease. It would also provide for periodic progress payments.

## **OPTIONS**

The study team recommends to the Task Force that, with a view to the better management of government procurement, the government consider:

1. Developing a plan, to simplify the accounting and billing methods used by DSS in collecting its "fees" for procurement services, and reduce the



cost of this system; this plan to reflect savings available from setting DSS's monthly fee based on the annual expected billing to each department;

2. To more vigorously implement DSS's "make or buy" policies, review the Department of Supply and Services "make or buy" policy for communications services, including, among other things printing, expositions, publishing equipment maintenance and repair, video production facilities to determine whether such services need to be mandatory, where:
  - a. there has not been significant changes in the amount of contracting out activity over two consecutive years;
  - b. there may no longer be economies of scale as a result, for example, of new technologies; and
  - c. departments can demonstrate that they are capable of implementing a "make or buy" policy for that service;
3. With a view to implementing a "make or buy" policy for translation services, establish a full revenue dependency system for the Translation Bureau for implementation starting with FY 1986-87.

## **LOW DOLLAR VALUE PROCUREMENT**

### **PURPOSE**

To identify ways in which the government's low dollar value procurement (LDV) activities can be made more cost effective.

### **BACKGROUND**

Low dollar value procurements have, until recently, comprised purchases of less than \$10,000. The new definition is "less than \$25,000". This paper uses the old definition simply because useful data exist for this.

Low dollar value purchases amount to 90 per cent (over 2.2 million) of the federal government's annual purchase transactions and at a value of \$1.4 billion, they constitute 20 per cent of the total dollar value (of procurements). These procurements cost about \$150 million to handle each year. This volume demands that LDV receive considerable management attention and acumen.

Low dollar value purchasing is very much a shared responsibility between DSS and program departments, particularly the contracting phase which, in larger procurements, is exclusively a DSS responsibility. There are several ways LDV purchases take place. Program departments complete more than half LDV procurements themselves, using customer-placed purchase orders and customer-placed standing offer call-ups (both explained later). DSS handles less than half the transactions, most through its Stocked Item Supply system, while the bulk of its LDV dollar volume is handled through specific-to-LDV, regionally based procurement groups.

The various handling mechanisms are:

- customer-placed purchase orders - DSS has delegated customer departments contracting authority for transactions of less than \$500 (with special authority for emergency transactions);

- customer-placed standing offer call-ups - A standing offer<sup>1</sup> enables program departments to requisition LDV items against open arrangements negotiated by DSS on behalf of the government as a whole or on behalf of individual departments;
- DSS-handled fill-from-stock requisitions - DSS fills some requisitions from its Stocked Item Supply system in three supply warehouses across Canada;
- DSS-placed contracts and purchase orders - DSS prepares purchase orders and contracts for LDV items using a number of acquisition methods specific to LDV (telephone buying, catalogue buying, etc.).

The approximate number of transactions, the dollar volumes of business and average dollar value of transactions for each LDV method are shown in Appendix A, along with data placing LDV purchasing in proper context with non-LDV procurements.

Appendix A shows that program departments arrange more than half their LDV procurements themselves (\$800 million of LDV.)

DSS arranges the remaining LDV procurements, amounting to \$550 million. Transactions against the Stocked Item Supply system comprise 80 per cent of DSS's low dollar value documents and 20 per cent of its LDV dollar value. Virtually all DSS's LDV work goes through its regional organization using telephone buying, catalogue buying and other specific-to-LDV methods.

Approximately 3,400 people are required to handle the government's LDV workload, less than half in DSS and the remaining in program departments.

The driving force within DSS's regional LDV operating groups appears to be increased volumes of contracts

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1 A standing offer is a contracting arrangement whereby suppliers offer their products or services to the government at a set price, for a set time, and according to set terms and conditions. Departments requisition specific quantities, for specific delivery, against this standing offer and thereby complete a contract. The requisition against standing offers is called a call-up.



processed, perhaps at the expense of maintaining customer and supplier relationships, and perhaps at the expense of the best deal.

There are two important characteristics to low dollar value procurement. First, process cost (the cost of doing the purchasing) must be minimized. Process costs for low dollar value transactions typically amount to \$50 to \$75 (including time and effort by both DSS and program department people). And yet 80 per cent of LDV transactions are for goods with a product cost of about \$100 (product cost is the price paid to the supplier).

Second, program managers expect fast turnaround on LDV purchases. A turnaround time of less than ten days is DSS's maximum allowable time target. They usually average about 15 days.

Low dollar value procurement methods must focus both on keeping process costs down and on providing fast turnaround. To do this, a number of approaches are normally adopted:

- transactions consolidation - handling a number of transactions together, i.e., bulk buying, spreads process costs but can increase turnaround;
- buying from sources close to the customer - buying from distributors can lower process costs while reducing turnaround time considerably; this is commonly called regionalization in DSS;
- stocking the item in anticipation of demand - carrying stocks of very high demand items and distributing from stock is currently achieved through DSS's Stocked Item Supply system (SIS); SIS may not reduce process costs but it can dramatically reduce turnaround time if done properly;
- letting program department people do it themselves - DSS can return authority for more LDV transactions to program departments, (commonly called delegation); delegation can lower process costs and turnaround time;
- having DSS's buyers work out of program department locations rather than at DSS, where they are separated from their customers (commonly called co-location or customer cells) can reduce both process costs and turnaround;

- adopting hybrid methods which enable DSS program departments and suppliers to collectively conduct transactions in new and special ways; the standing offer is the best example of this; such methods can reduce both process costs and turnaround; and
- implementing streamlined processes, removing unnecessary steps and using computers where appropriate, can reduce process costs and turnaround.

The various approaches described above fall into two categories: those implementing different sharing of responsibilities between DSS and program departments (such as delegation, co-location, etc.), and those introducing improved methods and procedures (such as standing offers, Stocked Item Supply, and procurement automation).

All these approaches have some potential to improve LDV operations. However, none is right for every situation. And some approaches introduce significant risks, risks which must be well understood and well managed.

LDV procurement is of little interest to program managers, except when it is not working. Within DSS, LDV takes a back seat to higher dollar value, more technically complex procurements.

## **ASSESSMENT**

Key issues in the LDV area are: coordination of the numerous approaches being pursued to improve LDV operations; the dilemma as to which combination of approaches to adopt; and, how much to invest in low dollar value procurement (as opposed to other areas of procurement).

Delegation of contracting authority to program departments is arguably a good approach to reduce handling costs and turnaround. As a result, DSS has proposed raising program department delegations from the recently set \$500 level (up from \$250) to \$10,000. They have attached conditions to this, namely that program departments ensure acceptable quality contracting, that they delegate requisitioning authority to their own regional people, and that they do their part in buying from regional suppliers and small business.

If the program departments accept the \$10,000 delegation, and it is the view of the study team that many will, most LDV transactions will become hidden in program

departments. This will make it virtually impossible to manage LDV acquisitions on a commodity-oriented government-wide basis. This will in the opinion of the study team damage irreparably DSS's important common services role in the LDV intensive regions; it will remove the possibility of attacking high administrative costs for LDV through systems improvements and easily applied automated approaches; it will increase the prices paid for products bought by about \$70 million (7 per cent was clearly shown as the cost of delegation by a 1978 LDV study); and it will destroy a key buying operation which is working reasonably well.

There are other more cost effective, less potentially damaging, and less risky ways of achieving the same ends as delegation.

Regionalization of procurement has been pursued as the best way of involving regionally based and small business suppliers in government business. This initiative has the added advantage of reducing turnaround at an acceptable paid-price for goods.

Regionalization within DSS's operation (as opposed to regional buying done through program departments) may have run its course. Other than fine-tuning, there may be very little additional LDV procurement by DSS which can be carried out through regional suppliers without affecting the natural supply patterns of the various commodities needed by government.

Co-location of DSS employees in program departments (i.e. with program department materiel people) has been tried for a number of years, particularly in support of National Defence base operations. This arrangement has worked well by all accounts. Its success spawned a few sub-offices (or DSS districts) which have also proved successful.

Co-location is not the answer for all LDV buying. Furthermore, co-located units cannot be expected to handle all purchasing transactions. However, more co-location can be done, particularly in the National Capital Region, perhaps including some higher dollar value items in addition to LDV.

Standing offer purchasing can streamline procurement by finalizing contract details early, while leaving specifics



on which program department wants what quantity, when and where until later. However, standing offers the study team learned are plagued by poor management and control. The technique has been applied somewhat indiscriminately (too many commodity areas); duplicate offers have been created (some with the same supplier for the same goods); program departments have difficulty knowing which commodities are covered by standing offers; and, supplier negotiations are hampered by a total absence of information on who uses which standing offer and to what extent.

It is the view of the study team that standing offers have not been exploited satisfactorily. Doing so will require considerable attention by both DSS and program departments. Standing offers represent about \$1 billion in purchasing volume (not all of which is LDV), an amount which justifies the attention of senior government buying officials.

The Stocked Item Supply (SIS) system comprises six groups of commodities, each of which requires separate attention. Included are medical supplies (\$7 million per year), office supplies (\$29 million per year), government standard forms (\$14 million per year), janitorial supplies (\$10.5 million per year), furniture (\$17.5 million per year), and miscellaneous items (\$13 million per year). The main benefit of SIS accrues to remote sites where the government has offices (here, supply at any price is the problem). SIS's low prices (for some commodities) are also a government-wide benefit. The key issue concerning SIS is whether or not to privatize. Privatizing any part of SIS would have to be done in a way which assures continued supply to remote locations.

Office supplies and janitorial supplies can probably be privatized with little difficulty, although the benefits would be marginal. However, this is the main area where remote supply is a problem.

Medical supplies can probably be privatized quite easily, but only at an increased cost to the government of about \$1 to \$2 million per year (departments would have to pay around 15 to 30 per cent in higher prices to outside medical suppliers). There would be about \$1 million of SIS inventory investment released if medical supplies were privatized.

Government forms and furniture are both special problems. Alternative methods of stocking and distributing government forms primarily involves using public warehouses across the country and having government buyers requisition orders from these warehouses. There appears to be little room for improvement here.

The use of special made-for-government furniture is an issue. As long as the government continues with its specially-designed furniture policy, it will have to take responsibility for its distribution, including the related costs of carrying inventory. However, given that government standards will persist, there is no reason why departments need the luxury of short-term furniture delivery through the SIS system. They can tie in their furniture requirements with a regular, perhaps quarterly, ordering cycle for bulk acquisitions and make do with borrowed or disposed-of furniture until the order is met by the manufacturer.

Attention will have to be paid to offsetting buildups of departmental inventories. There is no need for buildups because program departments already carry duplicate supplies of most SIS-type goods.

Streamlined methods other than those being pursued by the government offer significant prospects of improving the cost effectiveness of LDV procurement. However, these are generally precluded by law. For example:

- telephone requisitioning - this would involve DSS accepting requisitions for LDV over the telephone rather than in written form, as is currently required by law (the Financial Administration Act, Section 26);
- self-pay purchase orders - this would involve DSS issuing purchase orders to suppliers along with a limited dollar value, preauthorized cheque in the agreed-to amount. This is also against the law (the Financial Administration Act, Section 27) which requires that work has been performed and certified as such before a cheque can be issued).

The Procurement and Acquisition Support System (PASS) is an ambitious effort to make computer-based tools and information available to line procurement officers (as a productivity initiative) and to generate comprehensive management information. Both of these objectives are very

important to better management and more cost-effective operations of DSS.

PASS is being introduced in stages, with each new version having an increased number of features and broader application to DSS's organization. This is a careful way to proceed. However, early implementation of PASS will do little for the mainstream of low dollar value procurement, the area of DSS's business which most cries out for improvement in turnaround time and process cost reduction. For instance, this computer-based system will not adequately support SIS transactions, it will not do standing offer call-ups, it will seemingly add to the work in telephone buying, and it will not facilitate bulk buying.

There is no clear direction within DSS on which approaches it is pursuing for the various areas of its LDV business. In parallel, the department is pursuing a \$10,000 delegation limit; it is developing computer systems which will assist acquisition functions, a development which conflicts with delegation (if program departments do LDV buying, DSS does not need PASS); it is proceeding with further regionalization when it is questionable how much more is possible within DSS's operation; it is considering privatizing SIS; standing offers are just beginning to receive attention; and co-location is not receiving much consideration at all.

Low dollar value operations cannot be tackled in piecemeal fashion. They comprise various streams of one business. A comprehensive approach showing the ways in which LDV will take place must be developed if DSS's current cost effectiveness, and the government's as a whole (on LDV), is to be maintained or improved upon.

Low dollar value procurement is the government's main business contact with thousands of regional and small businesses across the country. It also comprises 2.2 million transactions through which DSS can show both suppliers and user departments it knows how to deliver a cost-effective procurement service. LDV is not a revenue-dependency money maker. In fact, DSS loses money on many of these transactions. However, with appropriate attention, the cost effectiveness of LDV to the government as a whole can be improved upon considerably, lead by DSS. DSS has the expertise, the mandate, the tools, and the involvement in all user departments. These are the four necessary ingredients to success.



Conclusions: The delegation of \$10,000 contracting authority to program departments, proposed by DSS, runs considerable risk of damaging the government's procurement management capability. This initiative should not be pursued further without a more concerted effort to test other ways of achieving service improvement and more cost-effective operations.

Program departments should delegate more requisitioning authority to their regional people to enable DSS's cost-effective regional units to handle more LDV procurement work.

Co-location of DSS employees in or near program departments is a cost-effective way of handling LDV procurements (including smaller non-LDV procurements). This operating concept deserves more attention than it has been given by DSS. Co-location should be pursued particularly in and around the National Capital Region.

The standing offer method of contracting has not been exploited fully. It could deal with service and cost-effectiveness concerns surrounding LDV procurements, if it is properly developed and managed. In particular, information on how standing offers are used is critically needed.

Privatizing the Stocked Item Supply system, now under investigation by DSS, is a worthwhile initiative, particularly for office supplies and janitorial supplies. However, privatizing in medical supplies is likely to be more costly. In the areas of government forms and furniture, use of public warehousing might be a more useful approach.

For furniture, as long as government standard furniture continues to be used, program departments should be directed to order furniture according to a periodic ordering system, with direct shipment from the manufacturer and with short-term furniture being provided out of the disposal inventory.

Efforts on the automated support system for procurement (PASS) do not provide an early enough solution or a broad enough coverage of low dollar value procurements. PASS development should focus on LDV at the expense of other line procurement operations, but not at the expense of its management information objectives.

DSS has not developed a comprehensive, well-thought-out approach to its LDV business. It needs to do so immediately and it should do so on a commodity basis.

## OPTIONS

It is the option that:

The study team recommends to the Task Force that the government consider the following measures in order to achieve better management of government procurement and economies in processing costs:

1. A plan for handling government-wide, low dollar value procurement that will:
  - a. result in lower overall processing costs and improved overall turnaround time,
  - b. outline the responsibilities of DSS and client departments and detail procedures to be followed,but will not
  - c. increase delegation of contracting authority by the Minister of Supply and Services to other Ministers;
2. establish an administrative policy on furniture procurement to require departmental purchasers to submit furniture requisitions for processing to DSS, quarterly - for direct shipment, where practicable - rather than maintaining a large inventory of furniture as a stocked-item supply.
3. For departmental procurements which could be sourced regionally: review departments' internal delegation of requisitioning authority to regional offices; where appropriate, with a view to ensuring efficiency by purchasing closer to the point of use and to ensure accessibility to regional and small businesses, prepare a statement of existing delegation and proposed delegation changes with a view to implementing such changes by April 1, 1986.

**LOW DOLLAR VALUE BUSINESS VOLUME**  
**Fiscal 84/85**  
**A Profile**

LDV TYPE & HOW HANDLED	BUSINESS VOLUME				REFERENCE (see note)
	\$-BUS.VOLUME (\$million) %		DOCUMENTS (\$000) %		
LDV Handled by Program Depts					
local purchase orders (under delegated auth.)	500	7.0	600	25	(DSS's 1978 LDV study)
Stand. Off. Call-ups (small \$-amounts only)	300	4.5	500	21	
TOTAL LDV by Program Depts	800	11.5	1100	46	
LDV Handled by DSS					
Stocked Item Supply	100	1.5	875	37	(DSS 84/85 SIS)
LDV methods (telephone buy etc.)	450	6.5	250	11	(DSS 83/84 Contract Statistics)
TOTAL LDV by DSS	550	8.0	1125	48	
TOTAL LDV	1350	19.5	2225	94	
Non-LDV by DSS					
Standing Offer Call-ups (larger \$-amounts only)	800	11.5	50	0.2	
Other Large Purchases	4900	68.5	150	6	(DSS 83/84 Contract Statistics)
TOTAL Non-LDV by DSS	5700	80.0	200	6	
TOTAL PURCHASING VOLUME	7050	100.0	2425	100	

**Note** - The figures for local purchases orders and standing offer call-ups are order-of-magnitude estimates only. Also, data for these do not appear in DSS's contracting statistics.



## CONTRACT TERMS AND CONDITIONS

### PURPOSE

To evaluate the need for improvements in the terms and conditions (T&Cs) used in government contracts issued by the Department of Supply and Services (DSS).

### BACKGROUND

Since the Second World War there have been complaints from industry about the terms and conditions used by DSS. Recently DSS has responded to these complaints with corrective action in the form of:

- The Building Block System of Conditions that is being developed with industry consultation and which will replace existing terms and conditions. Completion is planned for November 1985.
- Dialogue with industry on revision of financial and accounting policy.
- Dialogue with industry on revised clauses for warranty and liability.

The major outstanding area of industry complaint is terms and conditions governing intellectual property. Present policy originated in Treasury Board (TB) Minute 468904 issued August 18, 1954 which held that government should own data it has paid for. This has caused difficulty in managing the data. Similar difficulties have led the U.S. to follow the U.K. practice in which the contractor owns the data with a "march-in" provision if opportunities are not pursued. In this way the government can take back ownership of intellectual property if it feels a contractor is not making acceptable use of such property.

In August 1983, the Minister of State for Science and Technology (MOSST) issued a series of recommendations, The Disposition and Exploitation of Intellectual Property that advocated performer ownership. More recently, the Ministerial Task Force's study team on Subsidies and Services to Business, proposed that the basic objective of Canadian Patents and Developments Limited (CPDL) should be "the maximization of worldwide revenues from intellectual property". This means that CPDL should exploit presently owned intellectual property and provide a facility for future exploitation. It does not prohibit the alternative

of performer ownership, if that were seen to be the best way to serve the taxpayer's interests.

A study of the handling of intellectual property by the federal government was carried out for the Minister of State for Science and Technology in late 1984. It found consensus in the departments and agencies for performers to retain ownership and control of intellectual property. A rationale was developed as to how that would serve the taxpayer's best interests and realistic caveats were developed.

## **ASSESSMENT**

The adoption of a performer ownership policy can have many benefits if it were done in a manner that serves the taxpayer's best interests. Industry will find the contracting process streamlined in a business-like approach and the uncertainty of government claims on background data will be removed (data already owned or will be owned by a third party). As a result, industry will be in a better position to exploit the intellectual property with new products which in turn could produce tax revenues greater than the loss in royalties. It would also simplify sub-contractor relationships. At present, prime contractors are required to pass on to their sub-contractors the government's intellectual property constraints. A review of ownership of intellectual property rights should include other approaches such as limited time or revocable licences.

Two aspects of CPDL's role can be enhanced. It can more effectively exploit Canada's data assets. It can also provide an avenue for smaller businesses to market their inventions worldwide and to obtain international protection for them.

A second issue involves the comprehensiveness and timing of the completion of reviews. At present, all terms and conditions are under review, but completion dates for clauses on warranty and liability and for intellectual property are uncertain.

## **OPTIONS**

In view of the foregoing, the study team recommends to the Task Force that the government consider the following measures:

1. With a view to achieving better management of government procurement and economies in processing costs, accelerate the implementation of revisions to government contract terms and conditions, including revisions to the finance and accounting clauses and warranty and liability clauses;
2. With a view to the better management of government procurement, review the application of 1954 TB Intellectual Property Policy with regard to the government's ownership of information created as a result of government contracts so as to ensure that industry can fully exploit such information within the constraints of prudent management of public funds, and implement relevant changes to the existing policy.



## **CONTRACT APPROVAL**

### **PURPOSE**

To examine the Treasury Board (TB) contract approval process to see if it should be altered or streamlined to reduce overhead burden without compromising prudence and probity.

### **BACKGROUND**

The Government Contracts Regulations (issued by the Governor in Council pursuant to the Financial Administration Act) and TB Administrative Policy require departments and agencies to obtain the approval of Treasury Board to enter into and amend contracts above certain dollar levels.

These submissions (about 1500 a year) represent a significant workload for the TB Ministers who must consider them at their weekly meeting. These submissions also consume the time and effort (preparation, analysis, and review) of departmental project and contract personnel, senior management and Treasury Board Secretariat (TBS) analysts and management.

### **ASSESSMENT**

TBS and key departments were interviewed about the costs and benefits of the contract approval process.<sup>1</sup> TB decision letters were reviewed to determine the kinds of decisions being taken by the ministers and the kind of direction given. Statistics were gathered from a TBS submission approval information system to sample numbers and values of transactions by type and department, and Secretariat processing time. These were compared with global statistics on transactions gathered from departments and available in DSS documentation.

TBS believes that the main benefits of TB deliberations on such submissions are that:

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1 Supply and Services Canada; CIDA; Transport; National Health and Welfare; Energy, Mines and Resources; Correctional Service of Canada; External Affairs; Employment and Immigration; and Revenue Canada (Customs and Excise).

- they inform ministers of current government activities which are important to the private sector;
- general policy objectives are brought to bear on procurements;
- the private sector perhaps believes it gets a fairer hearing (this may reduce private sector lobbying);
- money is saved when bad contracting is discouraged; and
- guidance or direction is given to departments in setting their own policies and procedures.

The decision letters dealt with significant issues. They identified policy implementation deficiencies and gave direction on contracting policy. They criticized departmental actions taken and provided directions on future action, expenditure and price reduction or advice, direction on departmental mandates and on interdepartmental consultation, direction on legislative and regulatory requirements, and planning and approval direction. They identified measures that should be taken to reduce risks or to protect the Crown's interests in particular contracts. They asked departments to report further information to Ministers, and to seek increased competition and provided guidance on desired socio-economic benefits and national objectives. There were some partial and some outright turndowns.

Responses from departments on TB submissions were mixed. Interviewees indicated that the percentage of departmental transactions requiring submissions to TB ranged from 0.25 to 20 per cent, depending on the contract category and department. The statistics indicate that the percentages range from 0.10 to 5 per cent with a few anomalies<sup>1</sup>.

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1 The Economic Council at 8 per cent; Finance (FIN) at 9 per cent; Privy Council Office (PCO) at 19 per cent; and the Canadian Transport Commission (CTC) at 24 per cent. The margin of error for these is quite large, however. These departments are small, with relatively few transactions, and the TB statistics covered only four months. Of these four, only the PCO likely has a disproportionate number of submissions relative to its size, apparently by its own choice, because it sets out its own TB approval criteria for the majority of its submissions (which deal with Commissions of Inquiry) in Orders-in-Council.

Government-wide, the percentage of transactions requiring Treasury Board submissions is less than 0.25 per cent and may be considerably less (because the number of small materiel purchases and standing offer call-ups is unknown).

Several departments believed the main shortcoming in the process is the delay incurred (both within departments and TBS), with estimates ranging from a few weeks to a year. TBS statistics indicate that the turnaround time from receipt of submissions at the Secretariat to Treasury Board approval averaged three and a half weeks, slightly over the three-week average targeted by that organization.

Most departments did not find the process burdensome because the percentage of transactions was low or because some effort had to be made at any rate and the incremental work essentially involved translation into a TB document. The main benefit seen by several departments was the independent objective review, but some showed a lack of appreciation or understanding of the TB review's purpose and could not see any benefit. Most felt increased delegation could be accomplished without compromising prudence and probity because TBS directed measures have been, or are being, put in place and because of the new internal audit process.

TBS began early in 1984-85 to review ways to reduce the number of submissions. Prior to this, CIDA had been given a significant increase in service contracting approval authority. Apparently this was due, at least in part, to the large number of high dollar value professional and consulting services contracts CIDA handles (it handles more contracting of this type than any other department except DSS). The Secretariat proposed to at least double existing authorities for entry into non-competitive contracts, and to provide practically unlimited authority for competitive ones as an incentive for departments to increase competition. The net result would be roughly a 50-per-cent reduction in the number of contract submissions overall. To date, the Secretariat's proposals have not received formal approval. This preliminary information, therefore, does not represent official TBS or TB positions, nor does it necessarily reflect the final TBS proposals on the subject.

The expectations of departments are that they would be given increased contracting authority if remedial actions called for by the TBS are adopted and performance is



improved. It appears also that the TBS is working on other measures (such as indicators for measuring contracting performance) to ensure policy compliance and maintenance of prudence and probity after any delegation increases.

Conclusion: The overhead burden of TB submissions on most departments is not significant. The greatest impact of any reduction would appear to be on time savings for individual projects. There would be some workload reduction for TB and the Secretariat, but this may not be significant, since not much time is spent on the less difficult, routine cases likely to be eliminated in any deregulation.

Conclusion: The idea of providing more incentive to competitive contracting by increasing authorities for it is an attractive one. Competition ensures less risk to prudence and probity, reduces prices, generally obtains best value for money, and meets the government's obligations to be fair to its potential suppliers.

## **OPTIONS**

The study team recommends to the Task Force that the government consider streamlining the procurement process and increase competition by submitting for Governor-in-Council approval amendments to the Government Contracts Regulations to increase the dollar levels at which contracts must be submitted for TB approval, provided that:

- a. these contracts have been competed for; and
- b. relevant government program and project approval requirements have been met.

## **WAREHOUSING, STORAGE AND DISPOSAL**

### **PURPOSE**

To identify methods to make federal government warehousing, storage and disposal activities more cost effective.

### **BACKGROUND AND ASSESSMENT**

Warehousing, storage and disposal all have a relationship to the amount of archives, stocks and equipment inventories kept by government. Needs for warehousing and storage directly result from the amounts of stock and equipment maintained. Surplus stock and equipment produces a need for disposal.

Warehousing and Storage: Warehousing includes receipt of goods, storage, custodial responsibility, packaging and repackaging (breaking bulk), goods issue, and record keeping. Storage is a more limited function encompassing little more than providing space for holding goods, equipment and/or supplies.

Warehousing can be done by an organization on its own or by a service organization. In the private sector, warehousing service organizations are called "public warehousemen" (a term which has nothing to do with government).

DSS provides warehousing services for the federal government. Departments wanting full warehousing services pay DSS, which offers warehousing on a fee-for-service basis. DSS has rights of first refusal on provision of warehousing services.

DSS provides warehousing services at its three regional supply centres in conjunction with its Stocked Item Supply system (SIS). Excess SIS space is made available to departments on a basis similar to the public warehousing system in the private sector.

DSS is privatizing some of its warehousing services on a pilot basis. The main reason is to free up warehouse space for use by disposal operations, which are currently being moved into regional facilities. As a result, DSS's central region warehousing service will be transferred to a private

Ottawa-based warehouser, provided that contract details can be worked out. The warehouseurs' bids are in and savings in the order of 50 per cent seem possible.

Public Works is responsible for providing storage facilities to program departments. It does so on a no-charge basis.

Warehousing and storage activities of the government comprise approximately 135 major civilian facilities (of 10,000 square feet or more) amounting to 4.3 million square feet. These 135 facilities are augmented by a further two million square feet in small facilities (of less than 10,000 square feet). Military warehouse space accounts for an additional 9 million square feet, for a total of 15 million square feet of civilian and military warehousing and storage.

By contrast, the public warehousing system in Canada has approximately 45 million equivalent square feet<sup>1</sup>. Beyond this, warehouses run by private companies (such as General Motors, etc.) easily amount to ten times the public warehousing system (i.e. 450 million square feet). Canadian Tire alone is reported to have about 5.4 million equivalent square feet of non-store, central warehousing space. The government's space is barely three per cent of the country's total warehousing space.

Close to half of the government's civilian warehousing and storage is used for special-purpose storage, rather than as managed and controlled warehousing. It is used for things such as rock samples (Energy, Mines and Resources), drilling sampling and test equipment, Arctic clothing, tax records, seasonal equipment, etc. (For a detailed sampling of storage uses, see Appendix A - Selected Items From the 1978 Supply Advisory Committee Study.)

Warehousing and storage costs are a key component of material management costs, accounting for between 15 per cent and 40 per cent of the cost of a commodity. Glassco recommended warehouse consolidation as an important

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1 Equivalent square feet takes into account the different cubic measures of warehouse configurations - a warehouse which is 50 feet high has more usable warehousing space than one which is 20 feet high.

thrust in bringing down costs through inventory reduction. This was attempted in the late sixties and early seventies, but results achieved are not clear.

In 1978, the Supply Advisory Committee Study determined that operating costs for just half the existing civilian warehousing and storage space amounted to \$25 million per year; that a large part of these costs was stockroom personnel or utilities; and that these costs could not be lowered. Few opportunities for savings in material management and warehousing were identified, despite a presumption that significant savings were possible.

Personnel costs in warehouses can only be reduced if stockroom control functions can be shared by consolidating warehouses. Doing this depends primarily on whether current stockrooms can, operationally, be located elsewhere. For this to be workable, timely and cost-effective access to the new stockroom would have to be possible. Few such situations were found. This thwarted the 1978 study. It found only \$550,000 in savings (on \$25 million in costs) and it acted on these at the time.

The 1978 Study concluded that solutions to cost effectiveness do not involve space control. Rather, they involve the disciplined application of sound material management principles. Improved discipline would result in minimum supplies being kept, surplus equipments being disposed of, and (as a bi-product) reduced needs for warehousing and storage space.

The issue of warehousing and storage comprises three distinct problems, each with its own set of options:

- a. where commercial or DSS warehousing space is used:
  1. if private sector warehouses are used, there is no need to change;
  2. if DSS's warehousing services are used, results of DSS's current warehouse privatization initiative should provide further direction;
- b. where non-commercial space is used and commercial space would do:
  1. a switch could be made to private services;
  2. continue with in-house space, but allocate charges on a full-cost basis;



3. be more disciplined about building storage space in new buildings (build less as a ratio of total operating space).
- c. Where non-commercial space is used and commercial space will not do:
1. be more disciplined about material management functions and take the focus off space utilization.

Conclusions on warehousing and storage: Government warehousing operations should be commercialized as much as is possible.

Government departments should pay for the warehousing and storage space they use.

Diligent materiel management should be practised to keep stocks to a minimum, to dispose of obsolete equipments and to reduce requirements for warehousing and storage.

Disposal: Disposal activities divest the government of surplus goods and material efficiently while obtaining the highest return from the sale.

Disposal is currently run through DSS's regional organization, with a shell organization, Crown Assets Disposal Corporation, acting as the legal umbrella. Crown Assets Disposal Corporation (CADC) is in the process of being dissolved, with final dissolution to take place at the end of December, 1985.

The volume of disposal business for the five years ending March 31, 1983 was as follows:

	82/83	81/82	80/81	79/80	78/79
	(\$ million)				
Proceeds from Disposal	22.1	20.0	17.9	16.1	12.7
Selling Expenses	0.8	0.3	0.8	0.3	0.2
Net Proceeds	21.3	19.7	17.1	15.8	12.5
CADC Administration	4.5	4.5	3.7	2.9	2.0
Net Proceeds	16.8	15.2	13.4	12.8	10.5

Disposal activities originate with declaration transactions through which program departments declare goods and materials as surplus. There were 20,000 declaration transactions in 1982/83.

Average proceeds per surplus declaration have been as follows:

82/83	81/82	80/81	79/80	78/79
\$1,121	\$1,059	\$1,019	\$1,331	\$1,017

Up to 1983, when CADAC was amalgamated with DSS's regional operations, CADAC had slightly more than 100 employees (104 in 1983). It earned \$45,000 of revenue per employee. There were \$215,000 of disposal activity per employee.

CADAC operations are revenue-dependent. Its fees range from 50 per cent for retail sales, through 25 per cent where net proceeds are less than \$100,000, to 2.5 per cent for net proceeds of more than \$500,000. Average revenues amounted to 20.6 per cent of net proceeds, \$4.5 million in 1982-83.

The number of individual sale transactions is considerably more than the number of surplus declarations, because departments declare whole lots of goods but sales take place at the item level. Overall, the 20,000 declaration transactions resulted in close to 500,000 sales transactions in 1982-83, mostly due to retail sales.

Each sales transaction is relatively small in dollar value, with only one over \$500,000 in 1982-83, and 52 producing \$50,000 or more in proceeds. There were also 43 public auctions and 21 cash and carry sales. These yielded \$4.8 million, for average proceeds of \$75,000 from each auction or sale.

Two-thirds of CADAC's business originate with three departments: National Defence (\$7.9 million or 37 per cent); the Royal Canadian Mounted Police (\$3.3 million or 15 per cent); and Transport Canada (\$2.0 million or 9 per cent).

The bulk of CADAC's proceeds result from sales of Coast Guard vessels, small aircraft, old uniforms and clothing, road vehicles, scrap metal, waste paper, and out-of-date

spare parts. Major equipment from National Defence is not disposed of intact, but dismantled and sold as scrap.

A study of the cost effectiveness of government disposal carried out jointly by Transport Canada and CADC in 1983 determined that:

- a. present disposal methods for major surplus material, such as motor vehicles, ships, aircraft, machinery, and electronic equipment, are cost beneficial to the Government of Canada;
- b. present disposal methods for material with a low-return potential are not cost beneficial.

Disposing of low-value items costs more than the proceeds it generates. Once high-value items such as vehicles, ships, etc. are removed, average proceeds amount to about \$15 per transaction. Transaction costs for the declaring department are about \$100 (excluding storage and warehousing costs) and the net cost to disposing departments for low-recovery disposals (those producing less than about \$100 in proceeds) is in the order of \$85 per transaction.

In addition, CADC incurs transaction costs which amount to about \$10 each (taking into account the significant lowering effect of retail transactions).

The time and effort required of the program department is a significant disincentive to these departments declaring property as surplus (i.e. disposable) with no financial return. Over and above identifying and declaring items, program departments generally have to store and care for surplus assets until disposal actions are under way.

Currently, the only incentive for departments to declare items as surplus is housekeeping, to keep facilities in better order.

For most departments, proceeds from disposal are trivial. DND's disposal proceeds (the largest of all departments by far - \$7.9 million) equal less than 0.1 per cent of its capital budget.

Program departments are not credited with the proceeds of disposals. These are deposited to the government's Consolidated Revenue Fund. Program departments received these proceeds until 1982. The practice, however, was found

to be ineffective; by the time disposals had been completed and moneys was deposited with the departments, the departments were already using the replacement equipment which had been budgeted years before.

Storing surplus property does not, in general, penalize departments. Storage space is not charged to departments.

The 1983 disposal study concluded that surplus materiel with a recovery potential of less than \$100 (at minimum) should never be reported to CADC. Rather, such materiel should be reduced to scrap (by mutilation) accumulated as scrap, and disposed of by weight.

A drawback to this approach is that mutilating low dollar value materiel and equipment of possible use to parties outside government will be seen as outrageous and illogical by the public.

More valuable items must be marketed more effectively. Finding the best buyer is key to obtaining the best price.

DSS is investigating computerizing its inventory of surplus assets, with a view to broadcasting this information across the country on its own internal computer network, and perhaps on public networks, thereby reaching more potential buyers. Other more effective ways are possible to market and distribute higher value items, including disposal companies, auctioneers, and brokers.

Disposing of low dollar value items through the same channels as high dollar value items is possible. If a combined low dollar value/high dollar value approach works, it will enable low dollar value items to be disposed of cost effectively without mutilating them and selling them for scrap.

Conclusions on disposal: Encouraging departments to declare materials and property surplus is the key to improved cost effectiveness in the disposal area, but few positive measures can be instituted to encourage disposal of either high or low dollar value items.

The only apparent means of encouraging disposal is to institute the disincentive of charging departments for storage space, or to reverse the 1982 decision prohibiting departments from keeping proceeds of sales.



There is no practical way to make low dollar value disposals more cost effective, other than to mutilate the goods and sell resultant materials for scrap.

For higher dollar value disposals, a computerized surplus inventory has some merit. However, other approaches involving auctioneers and disposal companies might be more beneficial to the government. These approaches should be investigated.

Specialized disposal companies may be able to deal with low dollar value and high dollar value items together as a package.

## **OPTIONS**

The study team recommends to the Task Force that the government consider developing and implementing a new disposal policy that will rely primarily on the private sector to store and, on consignment, dispose of any goods identified for disposal by departments.

## APPENDIX A

### SELECTED ITEMS FROM THE 1975-78 SUPPLY ADVISORY COMMITTEE STUDY

LOCATION	SQUARE FEET (000s)	COMMENTS
Vancouver	42.7	Stock Item Supply
	21.0	Vehicle Storage
	19.5	Spares, General Stores
	1.0	Tire Storage
	1.0	Mail Bag Depository
	1.0	Equipment for Christmas
Calgary	30.0	Instruments, Field Equipment, Vehicles
	19.6	Core Sample Repository
	12.8	Rock Samples
	1.3	Package Stores
	1.1	Bedding and Linens
	1.1	Furniture Off Supplies
Edmonton	70.0	Stock Item Supply
	32.0	Spares
	6.8	Furniture, Vehicles
	1.1	General Stores
	1.3	Stationery, Medical Bedding
	1.3	Spares
Saskatoon	5.9	Drilling, Sampling, Test Installations
	4.3	General Stores
	1.6	Stationery
	1.0	Furniture, Stationery
Regina	16.5	Construction Material Furniture +
	8.8	Wood, Clothing, Leather, Light Bulbs
	8.5	Christmas Sorting
	2.3	Publications
	1.8	Tax Records
	1.6	General Stores

LOCATION	SQUARE FEET (000s)	COMMENTS
Winnipeg	36.6	Records
	29.3	Arctic Clothing, Spares, General Stores
	20.3	Miscellaneous (Fenced)
	1.1	Lumber, Plywood
	1.1	Furniture, Tax Records
	1.0	Clothing
Metro	96.1	Stock Item Supply
Toronto	45.6	Records
	46.0	Christmas Sorting Area
	1.5	Lab Supplies, Furniture
	1.4	Equipment, Lab Supplies, Furniture
	1.3	Spares
Ottawa/Hull	227.4	Stock Item Supply
	188.5	Paper Stock, Publications
	180.8	Records
	173.2	Records
	129.6	Technical Stores, Equipment
	75.2	Equipment, Bags
	1.1	Furniture, Equipment
	1.0	Punched Cards
	1.0	Tax Records
	1.0	Records, Furniture
	1.0	Census Forms
	1.0	Questionnaires
Metro	52.0	Stock Item Supply
Montreal	45.0	Postal Stores, Clothing
	39.5	Records
	1.1	Postal Services, Bonded Stock
	1.1	Postal Services, Bonded Stock
	1.0	Lab Supplies, Furniture

LOCATION	SQUARE FEET (000s)	COMMENTS
Quebec	36.8	Clothing, Fabrics, Material, Hardware
	6.3	Equipment
	5.6	Publications, Furniture
	1.2	Records, Furniture
	1.1	Publications, Office Supplies
	1.0	Records
Fredericton	12.0	Equipment, Vehicles
	3.8	Equipment
	2.6	Equipment
	2.0	Chemicals, Stationery Furniture
	1.5	Records, Stationery,
	1.2	Technical Equipment, Furniture
Halifax	50.2	Stock Item Supply
	37.0	Equipment, Vehicles, Clothing
	36.3	Records
	1.3	Office Supplies
	1.2	Arms, Tires, Ammo +
St. John's	14.9	Spares
	11.5	Equipment, Bags
	1.3	Tires, Emergency Equipment
	1.0	Maintenance Material
	1.0	Salt



## HUMAN RESOURCES

### PURPOSE

To ensure that the Government's procurement activities are supported by well trained, experienced procurement professionals.

### BACKGROUND

In 1962, the Glassco Commission observed that the purchasing function in many government departments and agencies was dispersed, fragmented and too often left to individuals with inadequate skills. The great weight of procurement, involved low value goods commonly needed by many departments. This in itself pointed to the advantages of establishing a central purchasing organization. The Lambert Commission reported in 1977 that the new Department of Supply and Services (DSS) had made substantial gains in this task.

Whereas the procurement of low valued goods traditionally involves the greatest procurement volume, it is the procurement of complex engineered goods, comprising a very small proportion of all contract documents, that accounts for the majority of the funds. This paper focuses on the human resources that are dedicated to managing these funds. Table 1 illustrates these factors.

TABLE 1

Based on DSS Contracting and Resource Statistics

Expertise Required	Fiscal 83/84		Approximate Assigned PY Resources
	No. of Contracts	Value (\$ million)	
Low level	299,100	1,700	1,900
High level	2,900	3,900	730
Highest level (major Crown project)	1	4,000	170

Major dollar savings are possible only if the cost of these complex, engineered high value goods is kept to the lowest reasonable levels. Controlling these costs depends upon having enough competent procurement managers dedicated

to this task. There is a growing concern that the ability of government to field qualified procurement specialists to manage the acquisition of complex high value goods is diminishing.

Within DSS, four procurement directorates, referred to as Science and Engineering Acquisitions (SEA), are responsible for virtually all high dollar value and high level-of-effort procurements, principally on behalf of Department of National Defence (DND) and Transport Canada (TC). About 900 managers and support staff administer contracts for this volume of business and provide procurement services to major Crown projects.

These officers deal with highly technical goods and services, often with few sources of supply. A thorough knowledge of the product or service, the industry sector, and government policy and objectives are generally required to achieve "best value".

## **ASSESSMENT**

Recent program evaluation and other study material containing reactions of the principal clients to SEA show that there are concerns over the expertise of procurement officers in these areas. It is believed that attrition of experienced officers and replacement by less experienced staff (as workloads increased) was largely to blame.

DSS officials responsible for reviewing contract documents before approval and execution have similarly commented that the quality of contracting has been declining during the last decade. Many of those interviewed reasoned that inexperienced personnel with insufficient time were the cause.

Retirement projections indicate that if voluntary and mandatory retirement forecasts were realized, three SEA directorates could experience further significant losses of their best qualified people over the next several years.

The demands for experienced science and engineering procurement arising from the increasing number of major Crown projects have tended to deplete the directorates of many of their most senior and talented managers in order to staff project offices co-located with client departments. Given the number of major Crown projects planned during the next decade, this trend will continue.

The recent U.S. Government Accounting Office Study of the Grace Commission findings concluded that experienced and qualified program managers were critical to the success of projects. That Study supported the establishment of a positive career plan in program management; present career paths were found to be limited, and did not generate enough experienced people. According to a senior DSS official, the same problems now exist in Canada.

Planning for major re-equipment projects has revealed the need to concentrate on development of managers who are expected to eventually take charge of these procurements. Treasury Board (TB) in 1980 issued a guideline describing such a training program. However, the recommended TB program is equally appropriate and necessary for all managers responsible for procurements of high value and complexity.

According to several interviewees, restraint has discouraged DSS from taking advantage of formal courses or interdepartmental private sector exchanges and assignments. Instead, DSS has encouraged the use of on-the-job training, which is limited in its ability to fully develop procurement managers.

Although productivity improvements can help to reduce government operating costs, procurement managers can and should be expected to deliver significant savings. Procurement officials approve or recommend contracts of combined value in the billions of dollars; they must be the right people. The concern that exists among senior officials in DSS, and the major client departments is cause for considering remedial actions.

## **OPTIONS**

The study team recommends to the Task Force that the government consider developing and implementing, a comprehensive human resource plan for DSS procurement staff, to encompass, among other elements, the development of the skills needed in the procurement of complex, high value goods.

## **MAJOR CROWN PROJECT MANAGEMENT ISSUES**

### **PURPOSE**

To discuss certain management issues arising from a study of major Crown project (MCP) procurements.

### **BACKGROUND**

A major Crown project (MCP) is defined by Treasury Board as any project for which the expenditure consists of public funds; the estimated cost is at least \$100 million; and the federal government is the owner, major user, or entity responsible for the delivery of the end item(s).

In addition, MCPs will normally possess one or more of the following characteristics: high degree of risk; complexity; multiplicity of involvement; significant degree of public visibility or political sensitivity; major social, economic, or environmental impact for Canada; international, provincial, municipal or private sector involvement; urgency; and multi-year duration.

The study team has been able to identify, as of May 8, 1985, 49 MCPs either being implemented or in some stage of planning. (Appendix A, attached). A list of approved or presently contemplated capital acquisitions in Appendix B with the 1985-86 fiscal year allocation of person-years to manage each project. The list contains only equipment projects, since construction projects are being examined by the Study Team on Real Property Management.

On April 13, 1978, the Treasury Board (TB 756660) decided to issue a comprehensive set of management policies and procedures for major Crown projects which are contained in the Treasury Board Administrative Policy Manual.

The latest MCP overview analysis report prepared by the Treasury Board Secretariat (TBS) (Dec. 84) notes that, while the number of projects has increased, the percentage of projects with time delays, cost overruns or scope changes are decreasing. The conclusion of the report is "... Notwithstanding the slowness of implementation, in those cases where the policy has been adhered to, we believe it [the MCP policy] has proven to be successful in terms of greater project management efficiency and effectiveness, value for money, and quality of decision-making information".



The study team has found no reason to dispute this relative success but our studies indicate that some tuning is required to help avoid future difficulties.

The study team methodology in examining MCPs is reported in Appendix C.

## **ASSESSMENT**

The study team has identified the following potential problem areas:

- MCP management policy (including: the lead authority versus ministerial accountability; the project leader and the project implementation committee/senior review board(PIC/SRB) concept; and the project manager and the inter-organizational team concept);
- MCP contracting policy; and
- MCP process (including: the allocation of PYs to and staffing of project offices; and lack of corporate memory).

**The Lead Authority:** Current government policy requires all parties involved in a MCP to work under the leadership of one authority, i.e., the lead authority, in conformity with existing legislative ministerial accountability.

While the need for maintaining ministerial responsibility and accountability (and therefore full authority) is acknowledged, it is evident that the lack of single minister accountability for all aspects of a MCP affects the management of MCPs.

Some of the problems arising from "single" ministerial authority include split responsibilities, overlapping mandates, conflicting objectives and inadequate solutions derived from difficult compromises. The delays prove costly in terms of lost time and the public perception, in any case, is that the minister of a lead department is held accountable for all MCP activity in his area.

**Conclusion:** Cabinet solidarity assumes collective responsibility and accountability in the final analysis. The study team, therefore, does not propose to recommend single ministerial accountability for MCP management.

**Project Leader:** Similarly, there are indications that the project leader of a MCP, who is held fully responsible

for the overall management, is not given authority over the activities of the other members of the interdepartmental review board. Numerous examples have been given by Department of National Defence and Transport Canada of cases where individual members of the senior review board have operated outside the collegial management concept of the board to the detriment of the project. While some of these examples, upon further study, turned out to be honest differences of opinion, there is a suspicion that they are becoming more than just a nuisance.

**Project Manager:** At this level, there are fewer problems, because of co-locating the assigned staffs of the three key departments (i.e., lead department, DSS and DRIF) in the project office fosters a team spirit. Objectives are clearer and project coordination simpler. Nevertheless, especially during the project identification and contract negotiation stage, there is evidence that this approach to setting up a project office is less than ideal for resolving conflicts.

In this regard, the study team has received numerous complaints from DND, TC and DRIF officials that DSS, as the contracting authority, has been exceeding its common service agency role by entering into policy and process areas mandated to other government departments (e.g., leveraging industrial benefits and failing to give proper weight to the lead department's technical authority).

Of particular concern to the lead departments has been the reported tendency for DSS officials to unilaterally decide on time/cost/performance trade-offs during contract negotiations with the manufacturer without fully appreciating the effects on the other departments' objectives. From industry's point of view, the situation is confusing as there does not appear to be a single focal point on the government side with whom they can deal.

DSS in turn has recognized that the tension may result from its pursuit of competition and the checks and balances inherent in its mandate of ensuring prudence and probity in contracting activity. (Appendix D)

**Alternative Organizational Model:** Suggestions have been put forward describing other organizational models. These include centralizing MCP management in one department, establishing a Crown corporation for the management of all

MCPs, or contracting out all MCP management activities to the private sector.

These suggestions are based on locating the responsibility, accountability and authority with the project leader, as is the practice in the private sector. The study team has come to the conclusion, however, that none of these models can be used by the federal government without violating the principle of legislated ministerial accountability.

**Overlapping Mandates:** However, in view of the expected increase in numbers of MCPs in the next ten years and the need to properly manage highly visible and expensive projects with increasingly scarce management talent and resources, the study team believes steps should be taken to improve interdepartmental cooperation on MCP management. At present, there is a high level of frustration over mandate and "turf" questions among senior officials at DND, TC, DRIE, DSS and EA/Trade. One cause appears to be the duplication in assigned responsibility for industrial development between DRIE (legislated mandate) and DSS (Defence Production Act (1969)).

**Conclusion:** A review of recent MCPs should be conducted focusing on mandate issues. Major departments such as Defence, Transport, Regional Industrial Expansion, Supply & Services, and International Trade should be involved in this study.

**Other Problems:** The present focus for major Crown project management is the TBS. However, even there, policy is developed in one group and implementation, including the allocation of person years, is the responsibility of other groups. As a consequence, global problems such as staffing issues and corporate memory are not clearly recognized.

**Staffing Issues:** The study team discovered that no figures exist for the number of PYs allocated by TB and individual departments to MCP management. Our own approximate totals are included in Appendix B.

It is false economy to skimp on the personnel resources assigned to manage MCPs. For this reason, it is essential that special attention be given to the quality and quantity of the people being provided to MCP offices. This is particularly so at the early stages of a project. Project



managers have complained to us about the difficulties of obtaining PYs for their project offices in a timely manner, especially before TB preliminary approval is gained.

Part of the problem, as the Auditor General notes in his 1982 and 1984 reports, is the government's classification and staffing procedures, which are notoriously slow. They are unable to respond to the priority requirements of MCP offices.

It also appears to us that the government's personnel services contracting policies are unnecessarily restrictive when either contracting out for MCP supporting management services or hiring private industry resources to work within MCP offices. While these policies are undoubtedly necessary in normal circumstances, the study team believes their universal application to major Crown projects is counter-productive.

The study team recognizes the difficulty of responding to the demand from departments for more person years for MCPs. With the planned reductions in the public service, these pressures will only grow. It was, therefore, with concern that we found not only a reluctance on the part of MCP offices to seek ways and means to contract out for private sector resources where applicable (e.g. clerical help, cost control, software data processing, etc.) but also signs of significant duplication. For example, in the large MCPs where individual departments co-locate in the same area, each had separate central registries, secretarial help and other administrative services.

The study team estimates that, if DSS, DRIE and various lead departments were obliged to establish at least joint administrative services for each large MCP office, 5 per cent of the PYs could be redirected to other purposes (951 PYs 5 per cent = 47 PYs):

Conclusions: A central focal point should be established in the Treasury Board Secretariat for the allocation of PYs to departments for the management of MCPs.

- Pertinent ministers should be directed to review the priority each assigns to the allocation of PYs and staffing of MCP offices, with particular emphasis on the early stages of project identification and definition.



- The rules and regulations should be changed to enable MCP managers to hire directly into their offices the talent not available within government.
- Overheads should be reduced by establishing joint administrative services (clerical support, etc.) for all government departments co-located in a MCP office.

Corporate Memory: It is clear that, while individual departments keep some form of references to previous MCP management practices, the lack of a central collection point means coordination opportunities are missed, lessons learned are pigeon-holed, project management systems are labouriously developed at great expense only to be shelved, and experience is not continually researched and built upon.

Conclusion: A major Crown project management advisory service should be established and include a library of MCP management practices and procedures, an inventory of project management control systems, and a detailed file of lessons learned for use by newly identified MCPs.

MCP Contracting Policy: The study team briefly reviewed the MCP contracting policy currently being implemented by DSS. The concept involves contracting with the prime contractor for total, integrated system responsibility as a means of controlling costs and for a contract definition phase as a means of controlling technical uncertainty.

Conclusion: This is an optimum contracting strategy for controlling MCP risks. No change should be made to the MCP contracting policy currently being implemented by DSS.

## OPTIONS

The study team recommends to the Task Force that the government consider the following measures:

1. a. establish a central point in the Treasury Board Secretariat for the coordination of allocation of PYs to departments for the management of MCPs;
- b. establish an MCP advisory service to include a library of MCP management practices and procedures; an inventory of project management control systems; and a detailed

- file of lessons learned from previous projects for use by new MCP management staff;
- c. in cooperation with the Public Service Commission, develop ways to enable MCP managers to hire directly into their offices the talent not available within government;
2. with a view to reducing overhead and achieving economies that can be derived from collocation in an MCP office, the lead departments (as purchasers of the major capital equipment), Regional Industrial Expansion and Department of Supply and Services establish joint administration services, such as clerical support. within the allocation of PYs as determined in sub-paragraph 1(a) above;
  3. the mandates of the Ministers of Supply and Services, Defence, Transport, and Regional Industrial Expansion be reviewed in order to reduce or eliminate possible overlaps of responsibility;
  4. take steps to ensure that in the early stages of project identification and definition sufficient priority is given to both the allocation of MCP PYs and the staffing of MCP offices;
  5. no change be made to the MCP contracting policy currently being implemented by the Minister of Supply and Services.

## MAJOR CROWN PROJECTS

## EQUIPMENT PROJECTS

Lead Department	Identifi- cation Phase	Preliminary Approval and Planning Phase	Effective Approval and Implementa- tion Phase	TOTAL
DND	11	6	9	26
MOT	3	1	3	7
NRC		1	1	2
EMR		1		1
DOC		1		1
<b>TOTAL</b>	14	10	13	37

## CONSTRUCTION PROJECTS

Lead Department	Identifi- cation Phase	Preliminary Approval and Planning Phase	Effective Approval and Implementa- tion Phase	TOTAL
MOT		4	2	6
DPW		2	2	4
EMR			1	1
CBDC			1	1
<b>TOTAL</b>		6	6	12

GRAND TOTAL 49

**Note 1 -** DSS/CCC are also involved in 4 additional project offices (LAV, RAST, DRONE and BELL/MRB)

**Note 2 -** Since 1976, DND have completed 5 additional MCPs. (Sampson, LRPA, Leopard, 5/4 Ton and AVGP)

## PERSON-YEAR ALLOCATION

SERIAL	LEAD DEPT	EQUIPMENT PROJECT	PERSON-YEAR ALLOCATION FY 85/86						TOTAL
			LEAD DEPT.		DSS		DRIE		
			TB ALLOC	DEPT POSN	TB ALLOC	DEPT POSN	DEPT POSN	TB ALLOC	
I	MDT	1. Cdn Coast Vessel-MCP							
			61	32	1	10	0	.5	104
		2. Fleet Cap- ital Invest- ment Plan II							
		3. Polar 8	0	5	0	6	0	1	12
		4. Coast Guard Aviation Replacement	0	4	0	0	0	0	4
		5. RAMP I & II	30	35	0	9	3	0	77
		6. CASP (MLS)	23 (TBR)	10	3	0	0	.5	36.5
		7. Water Bomber	0	4	0	0	0	0	4
		Sub-total I	114	90	4	25	3	2	238
II	MDSST/ NRC	1. Remote Manipulator System							
			0	21	0	0	0	0	21
		2. Space Station							
III	DOC	1. MSAT	7	8	0	1	0	0	16
IV	EMR	1. RADSAT	25	0	0	1	0	0	26
		Sub-total II, III & IV	32	29	0	2	0	0	63
V	DND	1. CP140-Aurora	0	10	0	0	0	1.5	11.5
		2. CF18-NFA	141	74	0	25	0	8.5	248.5
		3. CPF	199	91	0	41	6	2	339
		4. MLW	0	19	0	4	0	1	24
		5. DELEX	0	8	0	0	0	0	8
		6. SARP	8	18	0	7	0	.5	33.5
		7. TRUMP	72	12	0	16	3	0	103
		8. MOST	0	22	2	6	0	0	30



LEAD SERIAL DEPT	EQUIPMENT PROJECT	PERSON-YEAR ALLOCATION FY 85/86						TOTAL	
		LEAD DEPT.		DSS		DRIE			
		TB ALLOC	DEPT POSN	TB ALLOC	DEPT POSN	DEPT POSN	TB ALLOC		
	9. SARSAT	0	9	0	0	0	0	9	
	10. CANTASS	0	2	0	3	0	0	5	
	11. SRP II	0	2	3	0	0	0	5	
	12. North								
	Warning	0	22	2	0	0	.5	24.5	
	13. LLAD	0	63	0	13	2	1	79	
	14. Air to Air								
	Missiles	0	0	0	0	1	0	1	
	15. TOCCS	0	46	1	0	0	.5	47.5	
	16. SKR	0	51	1	0	0	0	52	
	17. CASAP	0	21	2	0	0	0	23	
	18. CFSS Upgrade	0	62	0	0	0	0	62	
	19. Anti-Armour								
	SR								
	MR	0	23	0	0	0	0	23	
	LR								
	20. ISX	0	18	2	0	0	.5	20.5	
	21. IRSTD	0	3	3	0	0	0	6	
	22. CF LOH.	0	16	0	0	0	0	16	
	23. CCV 90	0	7	0	0	0	0	7	
	Sub-total V	420	599	16	115	12	16	1178	
	TOTAL - I to V	566	718	20	142	15	18	1479	
VI	DSS/ OCC								
	1. LAV	13	11	0	17	0	0	41	
	2. RAST	3	1	0	5	0	0	9	
	3. DRONE	0	0	0	20	0	0	20	
	4. BELL/MBB	0	0	0	6	0	0	6	
	Sub-total VI	16	12	0	48	0	0	76	
	GRAND TOTAL	582	730	20	190	15	18	1555	

### STUDY TEAM METHODOLOGY

The study team adopted the following methodology in examining the MCP policy and procedures:

A literature and file review which included:

- TB Administrative Policy Manual;
- TBS Overview Analysis Reports;
- Submissions and Project Briefs of Selected MCPs;
- Draft DRIE sponsored Memorandum to Cabinet "A Review of Industrial Benefits Policy in Federal Procurements";
- Cross Report on a "Review of IB Policy and Implementation for Major Crown Procurement", plus back-up studies;
- Auditor General's Reports 1982, 1983, 1984
- DND Internal Evaluation Reports on Selected MCPs;
- Data from DND's DPMIS;
- MOT Data on Selected MCPs; and
- DSS Paper on MCPs "The Procurement Issues of Major Equipment Acquisitions".

Conduct of interviews with selected officials of government departments and MCP project staff.

General review of seven major projects.

## DSS MAJOR CROWN PROJECT CONTRACTING POLICY

Contracting for total systems responsibility where the contractor agrees to field a complete, integrated system that operates to predetermined performance standards has been used with success. Failures to perform are charged to the contractor's account.

Previously, government project managers accepted the responsibility, often unwittingly. In these instances, the government acted as its own design and systems integration agent. This earlier approach is still a popular choice for many technical users, because it offers hands-on engineering opportunities. Hands-on engineering, however, is realistically permissible only when funds are available.

DSS has been trying to get contractors to accept total systems responsibility. This makes for more certain cost accountability, and the contractor is unlikely to undertake any work that will not, under the contract, be paid for. This strategy, however, demands an industry with the resources to commit to such a course, and the experience to conduct a formal contract definition phase. It also demands skilled project management, systems engineering, costing, and logistics definition. Such capability is scarce in Canada and its development is an industrial benefit which is often required.

The procurement process is much more complex for a large capital equipment project than for the more routine government buying. Such contracting ranges from what is required for research and development in the early concept phase, to the definition of contracts, to the design and, finally, production contracts. Each of these phases goes through a particular contracting process but each is a precursor to the next. As the project goes through a number of developmental phases, the contracting must be appropriate to the state of technical development. The design profile leading to integration of equipments and then to production moves through various states of "technical uncertainty". Each step seeks out information on the state of technical development and reduces risk. Decisions to invest in systems contracting can only be effective on this basis.

Given the willingness of Canadian industry to accept the challenge, the concept of major Crown project acquisition management has been under way for some ten years. The prevalent strategy has been to contract out as much of the definition, design and detail management of major equipment projects as is possible. Implementation contract risks have been identified and a specific procurement strategy developed for such risks as management, contract financing, design and development, logistics support, product assurance, software, production and industrial benefits. All aspects of the procurement package are covered: prime mission vehicle logistics, support and industrial benefits. Simplicity of agreement is sought, but this depends on the technical approach and the sophistication of the user.

The current strategic approaches for major Crown project procurement are:

- contracting for the total integrated system; that is, the equipment together with an integrated package of logistics support for use of the equipment in the field.
- the introduction of a Contract Definition phase which seeks to achieve, as completely as possible, a fully costed project definition, together with a suitably structured contract for acquisition. A venture group to act as a prime contractor is also deemed to be desirable.
- with such definition, often funded by the government, current legal agreements seek total systems responsibility from the prime contractor. Only in this fashion is it believed that cost increases can be identified and managed.

The study team believes that the contracting approach which passes near total system responsibility to the primecontractor is the optimum strategy to guaranteeing government control over costs and technical risks.



## **EXPENDITURE MANAGEMENT OF MAJOR CROWN PROJECTS**

### **PURPOSE**

To encourage the development of a preferred expenditure management options for major Crown projects (MCPs) or capital acquisition programs that would consider the following matters:

- providing the necessary flexibility for sound financial management;
- eliminating the incentive for departments to reallocate year-end lapsing funds to projects of lesser priority that might not otherwise be funded; and
- improving parliamentary visibility of total project costs.

### **BACKGROUND**

MCPs are projects whose budget is in excess of \$100 million, or of a lesser value if potential exists for major social, environmental, or economic impact, or for a significant level of political sensitivity and public visibility.

The principle of an annual lapsing authority underlies the method of obtaining payment authorization for these and other expenditures. Parliament grants authority to make payments by voting an annual Appropriation Act which specifies the total amount of monies that can flow from the Consolidated Revenue Fund in a specific fiscal year for a specific purpose (i.e., capital construction or acquisition). The annual lapsing appropriation that results from this process may not be the most effective mechanism for strong financial management of certain MCPs.

Estimating cash requirements for an MCP within a single year (some 18 months in advance) and then being required to control this cash flow under the present rules of annual lapsing authority is not always possible or practical. Uncontrollable events that cannot be foreseen by either government or the contractor can alter annual cash-flow requirements on a project (e.g., labour disputes or technical performance problems). Contractual agreements for projects of \$100 million and more typically cover several years, and usually require large individual payments that depend upon specific factors, such as the achievement

of a milestone (the actual progress made to a specific point in time) or the deliveries of main equipment, auxiliary systems, spares, training courses, etc.

Any variation from a targeted milestone or progress payment can affect cash outlays by several million dollars. For example, in 1981-82, more than \$100 million of the estimated cash outlay of \$400 million for the new CF-18 fighter aircraft depended upon certain milestones being achieved by the contractor in March 1982. Under the present annual system, the missing of these milestones could have resulted in year-end lapsing of \$100 million. This payment would then have become due (upon achievement of the milestones) in the following fiscal year, creating a cash-flow problem. In effect, the subsequent year's budget could not possibly have included provision for this large additional payment.

The approval of project expenditures on a single rather than multi-year basis has been questioned by both Comptroller General (CG) and Auditor General (AG) officials. From the CG perspective, the annual lapsing authority has been identified as a factor in the year-end spending rush that sees government expenditures almost double in the last three months of the fiscal year.<sup>1</sup> In effect, major lapses at year-end may lead departments to attempt to spend suddenly available funds on lower priority items, some of which might not otherwise be funded. Some form of "carry-forward" provision is preferred in order to eliminate any incentive for imprudent year-end spending.

Auditor General officials have noted that, over the years (as Parliament approves single-year appropriations) total budgetary costs of a project tend to escalate without prior visible parliamentary control and approval. They argue, therefore, that Parliament should be able to approve total multi-year expenditures on a project-by-project basis for the larger MCPs. This would be a major change from existing practice.

The desirability of some form of non-lapsing, multi-year authority for major capital acquisitions

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<sup>1</sup> Appendix C outlines in general the extent of year-end spending.

has been discussed in government for years. Interested departments, however, have never been able to agree on a proposal they would be prepared to place before ministers. (The diverse departmental and government agency positions on multi-year authorities are summarized in Appendix A).

These views illustrate, among other things, a fundamental disagreement between AG officials who emphasize multi-year authorities and parliamentary scrutiny on individual major Crown projects, and the DND view that budgetary flexibility should not be restricted to major projects, but should apply to the whole of its capital equipment program. These divergent views are not easily reconcilable. We have also been advised that the granting of additional budgetary flexibility could create certain problems for central agencies in forecasting the government budgetary deficit.

In the time available to the team, we have not been able to develop a specific proposal that would satisfy the divergent views of these parties. We have, however, concluded that continued inaction on this issue will serve neither ministers nor the government. The government will be faced with an increasing magnitude of major capital expenditures and attendant risk over the next 10 to 15 years. If problems exist in the expenditure management of these projects, they should be remedied now, before scurrying around for alternative, lower priority expenditures or ad hoc solutions during the next missed milestone crisis.

## **OPTIONS**

The study team recommends to the Task Force that the government consider developing ways and means of establishing multi-year, non-lapsing authorities for specified major Crown projects or capital acquisitions programs.

## APPENDIX A

### VIEWS OF DEPARTMENTS AND AGENCIES

The Office of the Comptroller General (OCG) strongly supports multi-year authorities for at least the larger MCPs. A list of ten options to effect this change (or a similar variant) is attached as Appendix B.

OCG support for this proposal is based in part on the identification of the annual lapsing authority as a significant factor in the year-end spending rush that sees government expenditures almost double (from their normal levels) in the last three months of the fiscal year. Essentially, at the point of realization that a milestone is going to be missed (otherwise resulting in a lapse) the department may try to advance other projects for which payments are due in future years. However, sufficient program flexibility is not always available, particularly when dealing with large amounts. The lack of a suitable mechanism to deal with this situation normally leads a department to attempt to reduce the amount of the lapse by spending some of the funds on lower priority items, which might not otherwise be funded.

The OCG has not yet quantified the extent to which lapsed funds on MCPs contribute to imprudent year-end spending, though they anticipate that the problem may be significant. A general review of the year-end spending situation, as seen by the OCG is attached as Appendix C.

Officials of the Auditor General's Office (AGO) similarly support the multi-year authority concept - in effect the placing before Parliament of a project-by-project vote of total project costs and subsequently allowing departments to disburse cash in the most economic manner over the course of the project - provided that total cost ceilings are not breached. The AGO remains similarly concerned about the year-end spending bulge and intends to make it a major theme in its next report to Parliament.



Treasury Board Secretariat officials have sent out mixed signals. On the one hand, the study team has been advised that multi-year expenditure authorities would make it difficult for central agencies to forecast the annual government deficit, given that project managers would be able to carry forward funds to subsequent fiscal years rather than letting them lapse at year end. On the other hand, we were advised that the benefits of cost control (and of delaying expenditures to the future where it makes economic sense) would outweigh the deficit forecasting concern - a concern that might be minimized in any event by more frequent cash-flow reporting on the part of project offices.

Officials of the Department of Finance similarly raised the deficit forecasting argument (and advised of a long-standing tradition of single-year expenditure approval by Parliament on other than statutory items) but seemed positive in their view that mechanisms exist to deal with the MCP problem.

The Transport Canada (TC) view was largely non-committal. TC argued that, to date, it has been able to manage its capital program without major lapses, that there would be difficulty in fixing project costs before Parliament at the outset, but that it would be advantageous to have a firm commitment of funds over the course of the project.

Finally, the Department of National Defence (DND), by far the largest MCP manager, has been a long-standing advocate of some form of carry-forward provision to avoid the forced lapsing of funds.<sup>1</sup> However, DND has stated that it is unprepared to accept any of the OCG options outlined in Appendix B, largely because they tend to control expenditures on a project-by-project basis. DND's preferred option would be a 5 per cent carry-forward provision on its total equipment budget, in effect allowing the department to carry forward rather than lapse up to \$100 million a year. This option, while offering DND substantial flexibility may not be acceptable to the central agencies, who would prefer to avoid setting a precedent of this sort that other departments could come to demand routinely.

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1 In January 1985, the Deputy Minister of National Defence wrote to the Secretary of the Treasury Board seeking a re-examination of the question.

## APPENDIX B

### ILLUSTRATIVE OPTIONS AND CONSIDERATIONS AS DEVELOPED BY THE OCG

#### OPTION 1            Status quo

No change to existing practice.

#### ADVANTAGES

- Least effort for TBS, OCG, et al.
- Maintains Finance's macro-level control of government spending.

#### DISADVANTAGES

- Risk of uneconomic allocation of Defence funds to avoid lapses.
- Continued criticism by the AG.
- Opposed by DND.

#### OPTION 2            Statutory vote

#### OPTION 2a          Statutory vote for all Capital

#### ADVANTAGES

- Solves the problem permanently without changing or violating the spirit of annual appropriations for non-statutory items.

#### DISADVANTAGES

- Requires separate legislation.
- Lack of administrative control and flexibility.
- DND could not move funds to capital from other votes.
- Requires major changes in DND financial control procedures.
- Problems integrating this approach with formula funding.
- Reduced fiscal control.

**OPTION 2b**            Statutory vote for specific large capital projects

**ADVANTAGES**

- Solves the problem permanently without changing or violating the spirit of annual appropriations for non-statutory items.
- Strengthens visibility, accountability, and control of large projects.

**DISADVANTAGES**

- Requires separate legislation for each project.
- Lack of administrative control and flexibility.
- Requires legislative amending process.
- Requires major changes in DND financial control procedures.
- Problems integrating this approach with formula funding.

**OPTION 3**            Legislative amendments to the Financial Administration Act (FAA) to permit multi-year capital funding

**ADVANTAGES**

- Currently under consideration by the OCG.
- Permanent solution to the problem.
- Mechanism can be used by other departments where appropriate.

**DISADVANTAGES**

- Changes to the FAA would likely be time-consuming and contentious.
- OCG does not have the resources necessary to proceed.
- Might require changes in DND financial management.

**OPTION 4**            Supplementary Estimates (SEs) to the extent of previous years' lapses

The department would allow unused capital to lapse and would be granted a supplementary estimate for the following year in the amount of the lapse.

## ADVANTAGES

- Satisfies DND requirement.
- Simple to implement.
- Maintains all existing flexibility.

## DISADVANTAGES

- Violates the spirit of annual appropriations for non-statutory items.
- Requires annual intervention by TB and Finance.
- Will increase the reported deficit for the year in which the SEs are granted (no source of funds in the fiscal framework).
- Opposed by Finance on the ground that it reduces macro-level control of government spending.

### **OPTION 5**            Funding formula amendments to compensate for previous lapses

Amend the funding formula each year to compensate the department for lapses occurring the previous year.

## ADVANTAGES

- None, the option is only included for completeness.

## DISADVANTAGES

- Requires annual intervention by TB and Finance.
- The lapse would have to be identified before the spring Multi-Year Operational Plan (MYOP) in order to adjust the formula for the following year.
- Would increase the reported deficit each year for which there was an adjustment.

### **OPTION 6**            Average lapse to compensate for increase in reference levels

Increase the Defence reference levels about 10 per cent of their capital budget and require the department to lapse an average of that amount each year. Thus a higher lapse one year could be balanced by a lower lapse (i.e., more spending) the following year.



## ADVANTAGES

- Does not violate the spirit of annual appropriations for non-statutory items.
- Does not require intervention by central agencies.

## DISADVANTAGES

- Reduced macro-level control of government spending.
- Requires changes to DND financial control procedures.
- Finance is not willing to agree to the necessary increase in reference levels.

### **OPTION 7**            Establish a Defence envelope reserve with a carry-forward capability

DND would move funds to the reserve instead of lapsing it and would then carry those funds forward (with the approval of the Minister of Finance) to the subsequent year where they would be available to the department.

## ADVANTAGES

- Would maintain control by the Minister of Finance.
- Would not require changes to DND financial management.
- Would not cause double counting of proposed expenditures.

## DISADVANTAGES

- Requires a new reserve.
- Requires intervention by central agencies.

### **OPTION 8**            Give Defence authority to undertake obligations up to its annual reference level rather than to spend or commit funds

## ADVANTAGES

- Would maintain the same level of control over the department.
- Would not cause double counting of expenditures.

## DISADVANTAGES

- Fundamental change to current practice.
- Difficulty in defining the fiscal framework.
- Reduced fiscal control.

**OPTION 9**            Establish a separate entity (something like a Crown corporation) for Defence which would not be subject to annual appropriation constraints

## ADVANTAGES

- Would give the defence entity sufficient flexibility to solve the lapse problem.
- Would not cause double counting of proposed expenditures.

## DISADVANTAGES

- Would remove too much control of defence affairs from government and central agencies.
- Implementation would almost certainly be extremely contentious.
- Fundamental change to current practice.

**OPTION 10**            Extend the appropriation period from the current one year to two or more years for DND

## ADVANTAGES

- Would not cause double counting of proposed expenditures.

## DISADVANTAGES

- Problem would still exist at the end of the appropriation period.
- Fundamental change to current practice.

## OVERVIEW OF YEAR-END SPENDING PATTERNS

## The Extent of Year-End Spending

It is a fact that heavy spending occurs at the end of the fiscal year and that the pattern reoccurs year after year. The 1982 Auditor General (AG) Report pointed this out.

The 1982 Report noted, however, that "year-end spending is (not) automatically wasteful" (para 1,101). The Report also noted that "to determine whether there are significant abuses... I (the AG) intend to review year-end expenditures in more detail as part of a debt and cash management study" (para 1,103).

A chapter on year-end spending is expected to be included in the next annual AG Report to Parliament, due in November 1985.

In 1984, the Office of the Comptroller General (OCG) reviewed year-end spending over the period 1980-81 to 1983-84. The main findings of this analysis are illustrated in Figures I and II.

Figure I indicates that over the period 1980-84, average monthly spending was approximately \$6.2 billion in all accounting periods.<sup>1</sup> However, over the same 1980-84 period, average monthly spending in the final three months of the year amounted to approximately \$11.4 billion.

In effect, to the extent that the 1980-84 period is typical, the average final quarter spending bulge amounts to approximately \$5.2 billion in extra spending per month.

Figure II indicates that \$3.2 billion (61 per cent) of this spending bulge was accounted for by non-discretionary

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<sup>1</sup> Expenditures by revolving funds are excluded to avoid double counting.

public debt charges, transfer payments, and miscellaneous charges (the largest being final settlements with Crown corporations on claims against appropriations). It is unlikely that a significant degree of 'imprudent' spending will be found in this non-discretionary category. The remaining \$2 billion (39 per cent) of the bulge was categorized as discretionary.

### **Matters of Special Interest**

To the extent that problems exist in respect of year-end spending, they are likely to occur in the discretionary spending category, in effect, that category where departments "have a choice" whether to spend available funds at year end or let them "lapse". However, for a variety of reasons, little incentive exists for managers to let the funds lapse.

Given the importance of discretionary final quarter spending, the OCG study addressed the matter in greater detail. Its analysis outlines two types of discretionary spending:

- expenditures that do not lend themselves to quick decisions and heavy spending because they require time to plan and fulfil; and
- expenditures that may lend themselves to quick decisions and heavy spending.
- Examples of the former include standard objects 01, 05, 06, and 08 -- respectively personnel, rentals, purchased repair and upkeep, and construction and acquisition of land, buildings and works.
- Examples of the latter include standard objects 02, 03, 04, 07, and 09 -- respectively transportation and communications, information, professional and special services, utilities/material/supplies, and construction or acquisition of machinery and equipment.

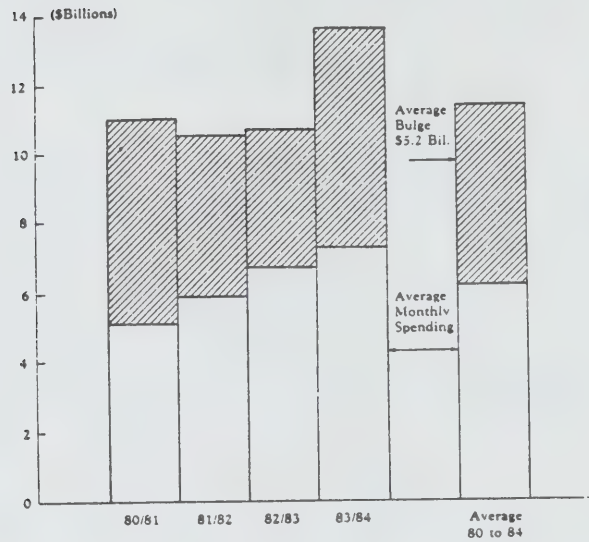
Following from this, the study found that 11 per cent (\$566 million) of the total final quarter spending bulge was accounted for by category (a) "hard to spend quickly" items while a much larger 28 per cent (\$1,446 million) was accounted for by potentially "quick decision" items.

These findings are illustrated in greater detail in Chart I and Table I.



FIGURE I

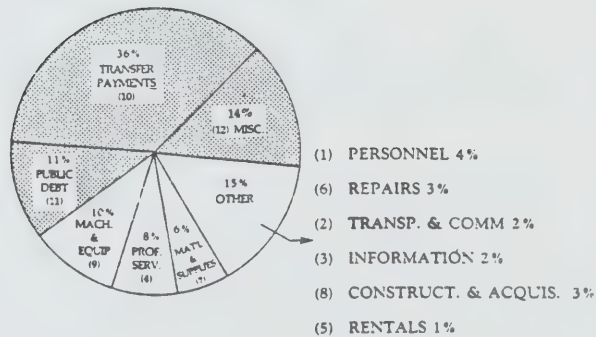
# SIZE OF THE AVERAGE YEAR-END SPENDING BULGE



CHARGES IN PERIODS 12, 13, AND 14  
NORMAL LEVEL PLUS BULGE

FIGURE II

## BREAKDOWN OF THE AVERAGE BULGE BY STANDARD OBJECT 1980-81 to 1983-84 \$5.2 BILLION



NON DISCRETIONARY: 61% (\$3.2 B)  
DISCRETIONARY: 39% (\$2 B)

## CHART I: FINDINGS

Of the \$5.2 billion 'average year-end spending bulge':

- 61 per cent is non-discretionary, primarily statutory type, including debt charges;
- 11 per cent is discretionary but does not lend itself to quick decisions and heavy spending;
- 28 per cent (\$1.4 billion) is discretionary and may lend itself to quick decisions and heavy spending:
- 87 per cent of \$1.4 billion is in s.o. 04 (professional services), 07 (material and supplies), and 09 (machinery and equipment);
- 66 per cent of \$1.4 billion is spent by six departments:

National Defence	\$558	39%
Employment and Immigration	103	7%
Transport	118	8%
Indian and Northern affairs	52	4%
Solicitor General	58	4%
Public Works	52	4%
	<hr/> \$941	<hr/> 66%

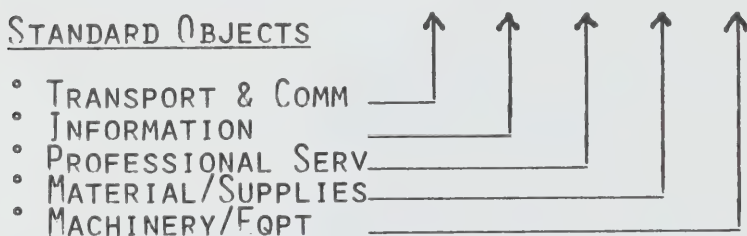
Although considerable debate could focus on the underlying meaning of these findings, a number of initial impressions may be drawn:

- The Department of National Defence accounts for 39 per cent of year-end discretionary spending.
- Transport Canada, the next highest spender, accounts for 8 per cent.
- Sixty-six per cent of year-end discretionary spending is accounted for by six departments.
- Employment and Immigration, which accounts for only 7 per cent of year-end discretionary spending typically spends over twice as much as any of the other five departments on professional and special services.
- Professional and special services spending as a proportion of total year-end discretionary spending appears to peak dramatically in other departments as well - notably Public Works, the Solicitor General, and Indian and Northern Affairs.
- The five largest discretionary year-end spending departments (exclusive of DND) spend substantially more (62 per cent) on transportation and communications, information and professional/

TABLE I

DEPARTMENTS CONTRIBUTING MOST TO  
DISCRETIONARY YEAR-END SPENDING BULGE

DEPARTMENT	(\$ MILLION)						% OF
	STANDARD OBJECTS						DISCRETIONARY
	02	03	04	07	09	TOT.	\$1.4M
NATIONAL DEFENCE	12	3	40	169	334	558	39
FMPL. & IMM.	7	6	81	5	4	103	7
TRANSPORT	5	1	39	25	48	118	8
IND. & NTH. AFF.	4	1	38	7	2	52	4
SOL. GEN.	6	1	20	15	16	58	4
PUBLIC WORKS	2	-	23	19	8	52	4
	36	12	241	240	412	941	
%	3	1	17	17	28		66

STANDARD OBJECTS

special services than they do on hard capital goods; only 38 per cent was spent on material/supplies and machinery/equipment.

While the above impressions are initially striking, both the OCG and the AGO have cautioned against dramatic action based on the study work completed to date. The AGO has taken the position that the "case is still out" on the extent to which year-end spending is a problem that requires remedy. For its part, the OCG offers a list of seven mitigating factors or structural aspects of the government's accounting and control systems that tend to lead to higher levels of expenditure being recorded at year end.

Of these seven mitigating factors, five are peculiar features of government accounting and financial process that tend to inflate the "book value" but are not likely to encourage an actual unplanned bulge of quick year-end decisions and heavy spending.<sup>2</sup> However, the remaining two factors - expensing of advances and current-year funding of multi-year capital projects - are potentially open to the encouragement of substantial year-end expenditures.

Of these two, the OCG has recommended and apparently received approval for the closing of a loophole that had allowed departments to make significant contribution advances at year-end, prior to the receipt of goods or services. New rules, intended to institute a "forced lapsing" of certain funds advanced under contributions are expected to reduce year-end spending by a substantial amount.<sup>3</sup>

Finally, the current-year or annual parliamentary funding of multi-year capital projects is almost certainly a factor in accelerated year-end spending. Since unavoidable slippages in meeting current-year project milestones are usually firm only in the latter part of the year, the

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2 These five features are as follows: payable at year end, year-end interdepartmental settlements, envelope and departmental resource reallocation systems, lag-in spending decisions due to interim supply, and March and P-13 budgets.

3 The OCG is unprepared at this point to forward a figure.



current-year funding approach can lead to potentially massive capital funds being made available to the reallocation process at year-end; particularly in areas of lesser or questionable priority. To our knowledge, no estimate of the amount of year-end spending due to this factor has been made.

## SECTION 2 - COMPETITION IN CONTRACTING

### OVERVIEW

#### INTRODUCTION

Private businesses, constrained by a bottom line, recognize the direct economic benefits of supplier competition in their procurement programs. For the businessman, supplier competition means reduced costs - and the reduction of unnecessary cost, by any reckoning, means a healthier operation.

Last year, less than 50 per cent of the value of contracts awarded by the federal government for goods and services were competitively awarded. For goods, excluding certain contracts for which there were no data, purchases amounted to about 45 per cent (although the average for the past three years including the frigate purchase, is closer to 50 per cent). For services, about 43 per cent was competitively awarded last year.

We have identified about \$2 billion of goods contracts that are now not competitively awarded but which might be amenable to competition. If only 25 per cent were competitively awarded, with economies of about 15 per cent and with a 50 per cent increase in competition for personal services and professional and consulting service contractors, at least \$100 million could be saved. However, there are enough conditions, enough gaps in data, and enough constraints to competitive procurement in the system, that we hesitate to suggest a target on cost reductions.

While the team believes that significant economies are possible, ministers may never be able to quantify them. In the final analysis once the goods and services are bought, seven economists will produce seven different estimates. We are not dissuaded by this. Competition does make sense, even in government procurement, and we suggest several ways to enhance it.

Our bottom line is that, while Treasury Board policy directs that standards of prudence and probity include the adoption of open contracting, there is relatively wide scope in the federal system for increased competition and reduced procurement cost.

## Observations in Respect of Services Procurement

The amount of attention given to competition in services procurement is typified by the fact that no one in government knew how much was awarded competitively until this study team asked the question.

The answer to the question is startling - about two-thirds of all service contract transactions are non-competitive. Slightly less than 60 per cent of the total value represented by these transactions is awarded on a non-competitive basis. In effect, each year the government awards approximately 140,000 contracts, representing about \$1.2 billion in business without reference to competitive forces.

The highlights of the team's observations include:

- a generally acceptable level of competition on large value "blue-collar" services and construction-related engineering and architectural services;
- very low levels of competition on personal service contracting and professional and consulting service contracts. These low levels occur on contracts above and below \$30,000, even though competitive tendering is more or less mandatory above \$30,000 in the Government Contracts Regulations;
- a surprising indication that competitive levels for similar types of contracts are not significantly different for DSS service contracting as opposed to departmentally handled contracts;
- a widely varying competitive performance record from department to department. While overall improvements have been made in the past three years, those departments which use centralized contracting units with qualified specialists consistently outperform those who operate in a decentralized fashion where managers carry out contracting with little independent review. Also, a small number of departments exhibit negligible management commitment to competitive contracting or to quality contracting in general;
- a generally low level of precision in needs definition and specifications for contracts that tends to transfer unnecessary risk from the contractor to the Crown; and

- a wide scope of opportunity for better value for money in services contracting through increased competition. A realistic increase in competitive contracting could net price savings of up to \$36 million though, as noted above, this would be difficult to quantify.

The team also undertook to review the impact on departments of a 10 per cent expenditure reduction in personal and professional service contracting. We have found that such an across-the-board cut would seriously compromise the ability of most departments to deliver their programs. Because Treasury Board allocation of PYs has not been commensurate with programs and funding approved, operating departments have been forced to rely on such contracts. We have also found that "informatics" services contracting is characterized by piecemeal procurement that undermines the potential for productivity improvement and that better ways exist to enhance public benefit in repair and overhaul services contracting.

### **Observations in Respect of Goods Contracting**

Our key observations are that:

- in 1984-85 DSS awarded without competition approximately \$3.9 billion or 56 per cent of its total contract business volume of \$7.6 billion;
- approximately \$1.9 billion of this non-competitive procurement can be justified for a number of reasons, ranging from strategic defence considerations to a lack of more than one supplier of the good in question;
- the remaining \$2 billion or about 25 per cent of total business volume offers opportunity for greater encouragement of competition and the majority of this in the science and engineering procurement category; and
- DSS lacks reliable data and a clear, commodity-based strategy for identifying and capitalizing on opportunities for increased competition in this latter 25 per cent of business volume.



## Remedial Action

The preferred options of the team highlight the need to develop and implement a strategy to systematically increase competitive levels in both services and goods procurement.

From a services perspective, the team believes that the following steps, need to be taken:

- introducing incentives for competition by delegating increased contracting authority to departments where contracts have been competed for and relevant program and project approvals have been met;
- establishing specific targets for increasing competitive levels in personal service, professional and consulting service contracts, and holding departments accountable for their achievement;
- introducing penalties for those poorest performing departments (from a prudence and probity viewpoint) as determined by Treasury Board, by temporarily removing service contracting authority and placing it with DSS until appropriate control systems are in place;
- ensuring that departmental contract control systems include an objective review of manager's specifications; and
- developing appropriate policies and plans for improved performance in the special areas of informatics and repair and overhaul service contracting.

From a goods perspective, our preferred options highlight the need for DSS, DND, and Transport Canada to develop and implement plans to increase competition in those commodity areas that offer the greatest potential. They also direct DSS to improve its coding and information system to provide accurate information on the level of competition in government contracting. As well, preferred options dealing with improving accessibility by encouraging competition through performance-based specifications equally apply here. The bottom line is that nobody appears to have analyzed the non-competitive side of the procurement ledger and developed a strategy to deal with it. This is what is needed.

## **COMPETITION IN CONTRACTING: SERVICES**

### **PURPOSE**

To examine government contracting for services in order to identify any problems relating to prudence, probity, and economy and to recommend solutions.

### **BACKGROUND**

No single department has an exclusive mandate to contract for the wide variety of services used by the government, and as a consequence, many departments issue contracts. The Department of Supply and Services (DSS) must be used in some special service areas, such as Electronic Data Processing (EDP), science and technology, temporary help services, and advertising. The Department of Public Works has a mandate to contract for construction-related architectural and engineering services for most departments and agencies.

The study team conducted a survey of 45 departments and agencies, including DSS, to obtain data on services contracting (see Appendix A). In fiscal year 1984-1985, the government issued approximately 207,000 service contracts and call-ups against standing offers valued at about \$2.15 billion. Of these, some 26,000 valued at \$1.21 billion were issued by DSS on behalf of client departments, and about 181,000 valued at \$0.94 billion were issued by other departments and agencies.

Service contracting is spread across all government departments because there are significant differences between contracting for services vs. goods. In addition, a wide variety of services are required. These fall into four categories: personal services (services of named individuals), construction-related architectural and engineering services, other professional and consulting services, and other services (including blue-collar services). Examples of the latter two types are listed in Appendix B, attached.

In his 1982 report, the Auditor General expressed concern about prudence and probity in government services contracting, citing, among other things, incidences of inadequate definitions of requirements, inadequate fee

challenge, non-competitive contractor selection and development of employer-employee relationships in contracts for service.

As a result, the Treasury Board Secretariat (TBS) asked departments to conduct internal audits of their contracting. Once TBS had evaluated these audits, they directed departments to undertake specified corrective actions, such as setting up contract review boards, turning the contracting over to DSS (if the department could not perform adequately), conducting internal audits on contracting, and revising departmental internal approval authorities. In 1983, about 20 per cent of the departments were assessed by the Treasury Board Secretariat as being poor performers in service contracting.

## **ASSESSMENT**

Most of the departments classified as poor performers have made significant progress, but a few have not accomplished much. Personal service contracting in particular has been poorly handled by the latter with the problems identified by the Auditor General in 1982 still prevalent. These include incidences of impropriety, such as bureaucratic patronage, conflicts of interest and nepotism. TBS continues to pursue remedial action with these departments. It is also developing performance indicators, against which all departments can be measured, clarifying and simplifying Treasury Board (TB) policy, and developing contracting training programs for managers.

To identify and assess other key issues, a number of departments were interviewed and sent questionnaires. Appendix C, attached, lists departments so contacted.

Several findings emerged from documentation review, interviews and the study team's questionnaire:

- performance in services is generally better than suggested by the 1982 Auditor General's report and subsequent press reports;
- performance is somewhat dependent on the type of service being contracted for. Competition is the norm for construction-related architectural and engineering services contracts and for blue-collar services contracts. Here departments perform well. Performance is less impressive with personal, and

professional and consulting services contracts. There is considerably more room for competition in these latter two categories, both for contracts below and above \$30,000 (see Appendix A). Competitive tendering is more or less mandatory above \$30,000 in the Government Contracts Regulations;

- departmental contracting performance is better when senior management is committed to and provides necessary tools and backing;
- departments which use centralized contracting units and qualified contracting specialists, have contracting under better control than those who operate in a highly decentralized fashion where managers carry out contracting by themselves;
- carelessly defined needs and specifications for services contracts result in less specific contract performance criteria and pricing. As a result risk is largely transferred from the contractor to the Crown; and
- the ability of most departments to deliver the programs approved by TB would be seriously compromised by any expenditure cuts in personal and professional services. Because TB allocation of person-years has not been commensurate with programs and funding approved, many departments have been forced to rely on such contracts.

See Appendix D for departments' commentary on the services provided by DSS.

For services contracting in general, several organizational options are suggested:

1. no changes: with the Treasury Board Secretariat improving policy and pushing departments toward improvements;
2. turning over certain problem categories of contracts to DSS, directing poorer performing departments to use DSS, or a combination of the two; or
3. turning all services contracting over to DSS.

The no change option would offer the most freedom of action, but would probably result in non-uniform performance and problems with prudence and probity in particular areas.



The third option would likely result in more professional and consistent contracting performance, but departments would have less flexibility and program delivery could suffer.

The second option would offer some advantages over the other two, by not constraining the manager where there are no serious problems while adding controls where problems arise. The main problems would be deciding where to draw the lines.

Conclusion: The third option is the best in principle and should be considered for application to those departments with the worst performance records, particularly with personal service contracts. Appendix E outlines one way DSS and the affected departments could be charged to carry out such contracts.

Several process options are also suggested:

- A. increase competitive contracting, particularly in personal and professional and consulting services, by taking steps such as:
  - 1. increasing incentives by reducing approval requirements for competitive procurement both at the TB and departmental levels;
  - 2. obtaining the commitment of Deputy Ministers to increase the proportion of contracts subjected to competition to prescribed levels within a given time frame; and
  - 3. applying penalties to departments that do not perform well.
- B. increase the rigour in defining contracting needs and specifications by taking steps such as:
  - 1. introducing an objective, independent challenge or review of specifications proposed by managers;
  - 2. when feasible, involving the private sector in specification writing or review; and
  - 3. using the services of the Bureau of Management Consulting on occasion for specification preparation or review.

The principal benefits of increased competition would be price savings of 10 to 20 per cent in those contracts subject to increased competition, reduced prudence and probity risks, increased fairness to qualified suppliers, and better ideas and approaches to carry out the work. The principal costs would be the increased time and effort required during preparatory and evaluation stages. Care would have to be taken to keep the competitive process simple and tailored to the size of the procurement.

Conclusion: With respect to dollar value, competition should be increased by at least 50 per cent in both personal and professional and consulting services contracting. This would result in price savings of from \$18 million to \$36 million per annum. In addition, other initiatives to increase competition across the board should be pursued.

The principal benefits of increasing the rigour in defining contract needs and specifications are better performance, less risk of cost overruns and generally better competition. The principal costs would be the extra time and effort required for this part of the procurement process, and the risk of conflict of interest in using the private sector, if not done prudently.

Conclusion: As a benefit to all services contracts, competed or not, more rigour ought to be introduced into contract needs and specification definition by taking the steps suggested.

Apart from services contracting in general, contracting in a number of specialized services was also investigated. These included aerospace repair and overhaul (R&O) (which for the most part is handled by DSS on behalf of DND) informatics<sup>1</sup>, science and technology, and advertising, all of which require issuance of the contracts by DSS.

The main issues identified for R&O were:

1. patriation to Canada;
2. the large number of sole source contracts when done in Canada (because of the extremely high set-up costs); and
3. diminishing R&O business due to modernization.

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<sup>1</sup> Includes EDP, office technology, telecommunications and other related technologies.

Because of proprietary rights considerations, patriation of R&O activity to Canada from foreign suppliers is only possible if Canada uses its competitive leverage when negotiating the purchase of the system. By planning and knowing its R&O requirements better, Canada would be in a good position to both identify opportunities for more competition, and to insist that the prime contractor enable the establishment of R&O capabilities and facilities in Canada. Canada's options under this scenario would be to import the R&O if this is more cost-effective, patriate it if more cost-effective or pay a premium to patriate it (in order for example to obtain security of supply). Canada would no longer be tied to a foreign source but would have the choice of using a Canadian source in competition with the former.

When patriated, the government could opt to:

- a. have the private sector provide the service entirely (promoting private sector wealth but creating some sole source suppliers); or
- b. set up in-house the R&O facilities and contract out competitively their management and operation (this would keep prices low and possibly facilitate regionalization but would transfer some risk and system responsibility to the Crown).

In addition, where total patriation is not feasible or where there is a single source for repair and overhaul in Canada, competition can be realized by what may be termed "break out". Consideration should be given to whether portions of an R&O requirement could be broken out and tendered competitively. The work being done by the Advisory Committee on Repair and Overhaul and U.S. studies indicate considerable potential for increasing competition in R&O contracting.

Conclusion: The government should patriate R&O activity to Canada when this is more cost-effective and not overlook the possibility of doing the R&O in government facilities, with management and operation contracted out competitively in cases where it would not be economically viable for the private sector to provide the total service and also give consideration to breaking out portions of an R&O requirement and tendering it competitively.

With the area of informatics, problems include a tendency to perform planning, design and procurement on a piecemeal basis and a lack of control of related EDP



standing offer use and telecommunications purchases, resulting in cost overruns.

This suggests that government-wide system planning and implementation should be improved. This would result in better system design, cost savings through interdepartmental sharing of common systems, more consistent application of the technology for productivity improvement and enhancement of contractors' system development capabilities. On the negative side, individual departments' flexibility would be reduced and the planning system would become more complex, involving considerable interdepartmental consultation and coordination.

Because of the lack of control of the use of EDP standing offers and telecommunications procurements, Treasury Board Secretariat suggested that the introduction of a few TB approval requirements for very large arrangements of this kind would be desirable.

Conclusion: Government-wide and departmental system procurement planning and implementation should be bolstered. The Treasury Board Secretariat may wish to initiate a few TB approval requirements as a control on very large EDP standing offers and on very large informatics/EDP related telecommunications purchases.

Science and technology has no major problems other than some human resource difficulties (DSS human resource issues are addressed in a separate paper under this study).

In advertising, there has been some public controversy regarding the selection of contractors. Government policy on advertising gives very precise direction with respect to its management and coordination and has recently been amended to introduce a level of competition. There appear to be no major issues regarding the way advertising is being handled by the bureaucracy.

## **OPTIONS**

The study team recommends to the Task Force that the government consider the following measures:

- A. with a view to the better management of government procurement, review TB policies related to informatics (EDP, office technology, telecommunications and other related technologies) to



improve both government-wide and departmental systems planning, and amend this policy as required;

B. with a view to maintaining and improving prudence and probity in government procurement and to encouraging more competition:

1. develop proposals, to increase the levels of competition by 1987/88 both in personal services contracts and professional and consulting services (excluding construction-related architects and engineers) contracts by 50 per cent relative to 1984/85 levels;
2. direct the transfer of contracting authority for personal services to DSS from those departments with the worst performance records, as TB may determine from time to time, upon three months notice to those departments. DSS will oversee this contracting until the relevant department puts in place appropriate systems, to the satisfaction of TB, to ensure that prudence and probity concerns are addressed;
3. establish guidelines for instructing departments, as appropriate, to include in their services procurement review processes an objective review of project managers' specifications, encouraging them to seek private sector involvement in specifications' preparation or review.

C. To enhance the competitive thrust in contracting:

1. develop and implement, plans to increase competition in those commodity areas which offer the greatest potential for augmenting competition in contracting, and develop and implement further plans in other commodity areas thereafter;
2. issue or amend policy directives to their departments, to assure that, during negotiations to acquire major equipment systems, priority be given to the establishment of repair and overhaul capability in Canada, where foreign systems

are being purchased, when it would be cost-effective to do so for the life of the equipment;

- D. where it would not be economically viable for the private sector to provide the entire repair and overhaul service, the Minister of National Defence to consider establishing DND facilities for repair and overhaul and subsequently contracting out competitively the management and operation of such facilities.

**APPENDIX A**  
**SERVICE CONTRACTS - FY 1984-85**

CONTRACT CATEGORY	DEPT.'S	CONTRACTS UNDER \$30,000						CONTRACTS OVER \$30,000						TOTALS	% OF COMPETITION			
		COMPETITIVE			NON-COMPETITIVE			COMPETITIVE			NON-COMPETITIVE				For Contracts Over \$30,000 in Terms of:			
		No.	(\$000)	No.	(\$000)	No.	(\$000)	No.	(\$000)	No.	(\$000)	No.	(\$000)		No.s	\$ Value	No.s	\$ Value
SERVICES OF INDIVIDUALS	DSS	552	2,870	1,648	9,130	59	4,897	110	8,649	2,369	25,546	35	36	26	30			
	OTHERS	3,340	13,546	24,682	46,731	131	9,717	307	16,828	23,466	85,822	30	37	12	27			
	ALL	3,892	16,417	26,330	55,861	190	14,615	417	25,476	30,829	112,369	31	36	13	28			
ARCHITECTS AND ENGINEERS FOR CONSTRUCTION	DSS	12	122	52	453	20	2,572	60	27,927	144	31,073	25	8	22	9			
	OTHERS	4,812	7,092	2,472	18,014	425	181,247	302	32,117	8,011	238,471	58	85	65	79			
	ALL	4,824	7,214	2,524	18,467	445	183,820	362	60,044	8,155	269,544	55	75	65	71			
PROFESSIONAL AND CONSULTING	DSS	4,366	36,326	5,675	42,771	1,231	218,529	2,104	369,638	13,376	667,263	37	37	42	38			
	OTHER	1,900	16,833	9,537	55,638	370	61,724	612	100,802	12,419	234,997	38	38	18	33			
	ALL	6,266	53,159	15,212	98,409	1,601	280,252	2,716	470,440	25,795	902,260	37	37	30	37			
OTHER SERVICES**	DSS	2,000	10,952	6,694	25,728	352	113,563	815	333,433	9,861	483,676	30	25	24	26			
	OTHER	45,520	109,308	82,929	56,512	2,604	138,364	1,397	79,050	132,450	383,234	65	64	36	65			
	ALL	47,520	120,261	89,623	82,240	2,956	251,927	2,212	412,483	142,311	866,910	57	38	35	43			
TOTALS	DSS	6,930	50,270	14,069	78,081	1,662	339,561	3,089	739,647	25,750	1,207,559	35	31	33	32			
	OTHER	55,572	146,780	119,620	176,895	3,530	391,052	2,618	228,796	181,340	943,524	57	63	33	57			
	ALL	62,502	197,050	133,689	254,976	5,192	730,613	5,707	968,443	207,090	2,151,083	48	43	33	43			

\*\* Primarily R&O for DSS;  
Primarily Blue Collar Services for Others

## **APPENDIX B**

### **Professional and Consulting Services include:**

Management Consulting  
Medical  
Legal  
Scientific  
Engineering  
Electronic Data Processing  
Business  
Accounting  
Economists  
Sociologists  
Public Relations

### **Other Services include:**

Cleaning  
Snow Removal  
Catering  
Laundry and  
Linen  
Security  
Maintenance and  
Operation  
Repair and  
Overhaul  
Charter of  
Vessels  
Rentals  
Miscellaneous  
Labour



## APPENDIX C

### Interviews were held with:

Agriculture

Communications

National Defence

National Research Council

Transport

Energy, Mines & Resources

Canadian International  
Development Agency (CIDA)

Employment and Immigration

Treasury Board Secretariat

Supply and Services

External Affairs

Correctional Service of  
Canada

National Health and Welfare

National Revenue (Customs  
and Excise)

### Questionnaires were sent to:

Agriculture

Communications

National Defence

National Research Council

Transport

Energy, Mines & Resources

Canadian International  
Development Agency (CIDA)

Employment and Immigration

Public Works

Fisheries and Oceans

Environment

Regional Industrial  
Expansion

Indian and Northern Affairs

## APPENDIX D

### DEPARTMENT COMMENTS ON DSS

Department comments on the contracting expertise and cooperation of DSS was generally favourable. Departments also believe that temporary help services is being handled well by DSS and that the arrangement for this central service should continue. Principal concerns expressed about DSS service in general related to delay and fees charged. The larger contracting departments prefer to handle their own services contracting as they believe that they have more expertise in the types of contracts in which they specialize. All departments, even those that have chosen to use DSS extensively, want its services to be available on an optional, competitive basis, rather than on a mandatory basis.

Departments, DSS, and the Treasury Board Secretariat all believe that DSS acts as a service agency and not as an enforcer of prudence and probity. The survey statistics (see Appendix A) indicate that competitive levels are not significantly different for DSS issued contracts than for similar contracts issued by departments, indicating that the client really determines if there will be competition. If DSS is used, prudence and probity may not be assured in all stages of the procurement process, but the contract itself will be professionally managed.

**Suggested Procedure for Joint Handling of  
Problem Personal Services Contracts  
by DSS and Departments**

The client departments involved and DSS should be directed to carry out the contracting as follows:

1. Competitive selection is to be introduced for these contracts, along with predefined work objectives or milestones and fixed prices against their achievement.
2. Contracts of a duration of eight weeks or less and of a dollar value of \$10,000 or less may be issued by the department.
3. A reserve not exceeding 10 per cent of the total annual number and dollar value of the personal service contracts could be held back and handled by the department to meet urgent and emergency needs.
4. Transactions against the reserve are to be reported to the Treasury Board Secretariat and to DSS on a quarterly basis.
5. The departmental requirements for such contracts are to be approved by its senior personnel officer on a case-by-case basis.
6. A Justice representative is to vet each contract to ensure that the risk of development of an employer/employee relationship is minimized.

In addition, an interdepartmental review board, consisting of Treasury Board Secretariat, Justice, Public Service Commission, DSS, and client department representatives should be set up to review and report annually to the President of the Treasury Board on the progress being achieved under this arrangement and to recommend any changes.

## **COMPETITION IN CONTRACTING: GOODS**

### **PURPOSE**

To review the nature and extent of single and sole source contracting in federal goods procurement, to highlight potential savings from shifting such contracts to competitive sourcing, and to set out a strategy for bringing about more competitive prices.

### **BACKGROUND**

Competitive bidding affords an equal opportunity for all qualified suppliers to share in federal procurement. Equally important, it enables the government to take advantage of market conditions to arrive at the best value for money. Nevertheless, under certain circumstances it is necessary to depart from normal competition policy and to consider only one source of supply. This paper deals with the issue from the standpoint of obtaining competitive prices while recognizing that competition among qualified suppliers best achieves this goal.

In 1984-85, the Department of Supply and Services (DSS) awarded without competition \$3,859 million in contracts, 56 per cent of total contract business volume. Contracts awarded without competition are recorded by DSS under two headings - sole source and single source. A sole source contract is awarded to the only supplier capable of meeting a particular requirement. Such a supplier may have proprietary rights to the goods being purchased or may possess the only manufacturing plant capable of producing the goods. A single source contract is awarded without competition because of extreme urgency, or cost-effectiveness, or for reasons representing specific national objectives of government.

Table 1 depicts the value of single and sole source contracts (no competition) and multiple source (competition) contracts issued by DSS (Supply), in 1984-85:



**TABLE 1.      CONTRACTS AWARDED BY THE DEPARTMENT OF  
SUPPLY AND SERVICES IN 1984-85**

Fiscal Year 1984-85 (\$ million)			
Award Process	\$ Value	% of Total Value	
1. Multiple Source	2,988.5	39.1	
Single Source	931.1	12.2	
Sole Source	2,927.9	38.4	
2. Total Non-Competitive Contracts	3,859.0	50.6	
3. Excluded*	784.8	10.3	
<b>TOTAL</b>	7,630.4	100.0	

\* includes departmental individual offer, unsolicited proposals, regional contracts under \$250 and contract amendments.

The study team believes these statistics may be somewhat inaccurate because of improper coding of documents by contracting officers. However, the comparisons in the competitive and non-competitive categories represent the extent of competition.

The government, by Cabinet decision, may also follow a course of non-competitive sourcing to promote such national objectives as the maintenance of a Canadian industrial base for certain strategic defence items. Examples of items supplied by "strategic sources" include rockets, heavy calibre ammunition, small calibre ammunition and small arms. The government is thus able to provide limited support to suppliers by assisting them to maintain or to enhance their capability to manufacture, repair, overhaul, test or develop these prescribed items.

Other government policies can also result in only one supplier being qualified to bid. These would include cases in which the government sponsors sophisticated manufacturing or technical capability for a specific supplier and supports the supplier through directed procurements. Support contracts have gone to Canadian suppliers of aircraft, flight instrumentation and satellite technology products in

the past. The monopoly on supply sources for certain commodities ranging from wheat to missiles may also dictate a decision not to undertake a competitive process.

These reasons are not an excuse for the apparent lack of competition suggested by Table 1, but simply indicate that other government priorities and market realities must be considered before concluding how much competition is left in the procurement system and where to concentrate efforts to improve it.

The United States recently made a commitment to the competitive process in government procurement with the passage of the Competition in Contracting Act of 1984. The Act states that all government agencies must use the competitive process in procurement except in certain situations. If an agency contracting officer does use a non-competitive procedure, he or she must submit a written justification to the head of the government agency if the contract exceeds \$1 million. In Canada, the more rigorous Government Contracting Regulations clearly direct that competition will be used in all goods procurements except where:

- the value of the contract is less than \$30,000;
- the goods are required urgently;
- the work is such that it would not be in the public interest to invite tenders; or
- only one person is capable of fulfilling the contract.

In all cases, the Treasury Board Administrative Policy Manual (Chapter 310) requires that reasons not to go to competition must be explained, recorded, and approved prior to awarding the contract.

## **ASSESSMENT**

Of the \$3,859 million spent in sole and single source purchases (see Table 1), how much can be moved to the competition side of the ledger? This question can be broken down as follows:

- In this analysis, all single and sole source contract awards have been combined into one category - non-competitive. Those contracts in which either only one source is known to be capable of performing

the contract or, for reasons of public policy, one supplier has been designated as a strategic source have been subtracted (see Table 2).

- After subtracting \$1,912 million from the total \$3,859 million spent on non-competitive contracts, \$1,947 million are left in which opportunities to encourage competition may exist (see Table 3).
- Strategies to encourage competition should be directed against this \$1,947 million in non-competitive contracts.

**TABLE 2. CONTRACTS AWARDED WITHOUT COMPETITION BY THE DEPARTMENT OF SUPPLY AND SERVICES IN 1984-85**

Nature of Procurement	Objective	Value (\$ million)
Canadian Commercial Corporation	Trade	698.8
Canadian International Development Agency	Food Aid	130.5
Sheltered Programs (Penitentiaries, etc.)	Social	.3
Defence Industry Productivity Program (DRIE)	Industrial Development, Trade	58.9
Centres of Excellence (Strategic sources)	Strategic Defence Base	339.9
Source Development Fund	Canadian Source Development	10.0
Unsolicited Proposals	Industrial/ Technological Development	27.7
Purchases from U.S. Gov't-defence goods	Defence	646.3
<b>TOTAL</b>		<b>\$1,912.3 M</b>

To explain briefly the above procurements:

- The Canadian Commercial Corporation awards contracts to Canadian companies on behalf of a foreign government the foremost being the United States. Much of this business goes to purchasing defence goods, and sources are often specified by the client government.
- Food and economic aid procured by DSS for the Canadian International Development Agency is sourced through food marketing boards that hold domestic monopolies on certain commodities, or through the highly competitive international market.
- A small quantity of light manufactured goods are procured through such agencies as Correctional Services, and other sheltered programs, to support rehabilitation.
- DSS arranges contracts on behalf of the Department of Regional Industrial Expansion (DRIE) with companies qualifying under the Defence Industrial Productivity Program to provide subsidy funds for projects to enhance Canada's defence export capability.
- Some military hardware can be procured only through the U.S. Government office of Foreign Military Sales (FMS); countries are not permitted to contract directly with the manufacturer. However, there still exists some potential for competition in this area by identifying FMS purchases which could be arranged directly with competing U.S. manufacturers. Such cases are few as Canada's requirements are often consolidated with much larger U.S. orders and quantity discounts are applied to prices.

When the total value of these procurements is deducted from the value of all non-competitive contracts, \$1,947 million or 25 per cent of the 1984-85 business volume, is left to consider. As noted, competition strategies should focus on these contracts.



**TABLE 3.                    REMAINING POTENTIAL FOR COMPETITION IN DSS  
DIRECTORATES**

<b>Award Process</b>	<b>Science and Engineering</b>	<b>Commercial and Industrial</b>	<b>International Operations</b>	<b>Total</b>
(\$ million)				
Total Non-Competitive Contracts	2,375	804	680	3,859
LESS Table 2	1,036	230	646	1,912
Remainder for Increased Competition	1,339*	574*	34	1,947

\* Certain specific services directly linked to procurement of goods, such as repair and overhaul, are included in these amounts. The strategies for achieving greater economy through competition in goods procurement are also appropriate. Additional strategies for dealing with this component of goods procurement is in Section 2 - Competition in Contracting: Services.

An assessment of the potential for savings through increased competition depends on the nature of the sole or single source situation. Some questions to consider are:

- Are the firms legitimate proprietary sources as a result of patents they license or own?
- Do they alone have the necessary manufacturing plant or knowledge and skill to perform the contract?
- Is the government market too small to support competitors?
- Have rigid contract specifications restricted the number of possible bidders?

The reasons vary from one procurement to the next but are common, to varying degrees, across all DSS directorates. However, by targeting specific commodities for increased competition and determining the major factors as to why competition is not present, single and sole source situations can be reduced and avoided in the future. In terms of the savings that can be realistically expected, DSS

estimates from past experience that a 10 to 20 per cent reduction in prices is possible when competition is introduced.

Actions that can be taken to minimize sole and single source purchases in this category totalling \$1,947 million include:

- senior management's commitment to competitive procurement, both within DSS and client departments;
- goods requirement definition that first takes into account Canadian industrial capability, wherever possible;
- joint procurement planning by the customer and DSS well in advance of a procurement to consider competition options; and
- joint client and DSS review and challenge of proposed sole source procurement if the client department and DSS are to be accountable for non-competitive contract awards.

Senior management's commitment to competitive procurement starts with a clear statement of the policy as to when non-competition should be tolerated. The notion of single or sole sourcing often implies a conscious decision in the face of feasible alternatives. Unrestricted use of suppliers as sole sources could be perceived as contradictory to the principle of giving all suppliers equal opportunity to compete for government business and of receiving best value. It is therefore essential to clearly identify the boundaries within which the government should recognize sole and single sources, and to establish precise criteria governing their selection. DSS and the Department of National Defence (DND) are now drafting the necessary guidelines and criteria to be followed for non-competitive contracting to support national objectives.

Increased competition is contingent on joint procurement planning by DSS and all of its client departments. Identifying and/or developing new competitive sources requires time and the full support of client departments. At the moment, departments do not feel sufficiently obliged to increase the level of competition achieved each year.

Participation by DSS at the requirements definition phase can be a critical factor in ensuring that consideration is given to the competitive implications of

the procurement. It is often too late to seek out sourcing alternatives if left to the final contracting phase. The lack of proper requirements definition by departments is a major reason why more competition is not obtained by DSS on government procurement. Hydro Quebec's procurement department has successfully introduced a sensitizing program for its client departments and a program to involve the private sector in defining and specifying its requirements. These initiatives have identified new suppliers in Quebec and consequently, have resulted in greater competition.

Among non-competitive contracts are orders negotiated with Canadian suppliers which have developed certain high technology products unavailable anywhere else in Canada. In these procurements secondary national objectives can also arise. It is often in the government's long-term interest not to encourage more Canadian suppliers to establish, at great expense, technology and manufacturing capabilities in these goods. In some cases, a sole Canadian source is successfully marketing the same products in foreign markets, and it can be argued that competition, i.e., a competitive price, is still obtained. It is also DSS's practice to seek a "most favoured customer" certification to guarantee that the supplier's prices, although not based on open competition, are no higher than the prices charged any other customer. An example of goods procured under these conditions are flight simulators acquired from a Canadian supplier which sells mainly in foreign markets.

Procurements of complete systems with requirements defined in terms of performance specifications have almost invariably been carried out through very vigorous and open competition. However, the winners, after receiving the prime contract, are often in a position to provide life-cycle support as sole sources to the government. Although much of this can be justified because these contractors hold exclusive proprietary manufacturing rights for spare parts or have the only plant and tooling necessary to fulfil the contract, there may be competitive opportunities nonetheless. These might be realized if the manufacturing rights for certain high usage parts were purchased by the government, if indeed they are proprietary rights, and subsequent requirements then competed among qualified suppliers. In other instances, simply sourcing directly with the prime contractor's suppliers (original equipment manufacturers), and avoiding one layer of price mark-up will result in lower prices for spare parts.



Recent U.S. studies have shown that substantial savings have been achieved in this way. For example, the U.S. Department of Defence estimates a 15 per cent savings when military spare parts are bought not from the prime contractor, but from the original equipment manufacturer, and a 25 per cent saving when bought competitively. A later review by the U.S. Government Accounting Office recommended that a formal process be established during the contracting phase to obtain from prime contractors the engineering or technical data necessary for subsequent procurement of spare parts from either the original manufacturer or through competition. If this process was left until after the prime contract was awarded, the competitive leverage to obtain this data was gone.

Data on the extent of competition at the subcontract level of procurements is generally collected only in the case of high-value procurements. Contracts awarded without competition often contain materials and subsystems awarded by the supplier to its subcontractors on a competitive basis. However, the impact of this competition on the DSS statistics is unknown.

So far, the focus has been on non-competitive procurements. For the \$2,988 million in contracts tendered, price reductions could also be achieved by improving the way in which the competitive process is carried out and the resulting contracts administered.

Competitively awarded standing offers, amounting to \$870 million, were placed with almost 17,000 suppliers in fiscal 1984-85. On occasion, client departments using these offers mistakenly paid prices higher than the prices quoted by the supplier in the offer. Although the issue of coordination and control of these offers is the subject of the paper dealing with low dollar value contracting, it is worth noting that competition may not necessarily guarantee lowest prices if subsequent contract administration is careless.

Maximum benefits can also be achieved by improving the way in which the competitive process is carried out when multiple sources exist. There are cases when government requirements are too small to attract all known qualified sources. Also, volume discounts cannot be offered to the same degree as discounts available when competitive large quantities of goods are required. In both cases, more competitive prices may result from consolidation of



government requirements either across all departments on an annual basis or by offering bidders the opportunity to bid for the right to supply over a longer fixed time period. Both methods are currently practised by DSS, but with the cooperation of all client departments, further gains are possible. Departments must be willing to compromise on the standards and specifications on common goods for consolidation to occur. Otherwise procurements, though perhaps competitive, will continue on a piecemeal basis and opportunities for price reductions will be lost.

Where potential remains for increased competition, DSS is in the best position to identify sources. One of the first steps in finding new suppliers to bid for contracts is to ensure earlier identification of proposed or follow-on (from original contract) non-competitive acquisitions which, in the past, have not been tendered because of a lack of qualified competitors.

Conclusion: Specific commodity areas should be examined to encourage increased competition. The initiatives planned by DSS for fiscal 1985-86 to improve competition, described in its draft Annual Procurement Plan Strategy, should be carried out. DSS contracting officials, with the cooperation of client departments, should be required to place greater time and attention on ensuring that capable and qualified sources to satisfy current and future government requirements are continually sought out.

## OPTIONS

The study team recommends to the Task Force that the government consider the following measures:

- A. with a view to maintaining and improving prudence and probity in government procurement and to encouraging more competition, establish guidelines for defining government and goods procurement and requirements (specifications and standards) which would:
  - 1. promote industry's participation in the development of government procurement specifications;
  - 2. encourage competition through the use of performance-based specifications rather than product-based specifications, wherever possible; and

- B. to enhance the competitive thrust in contracting, develop and implement, within four months of the RD, plans to increase competition in those commodity areas which offer the greatest potential for augmenting competition in contracting, and develop and implement further plans in other commodity areas thereafter;
- C. improve the DSS contract coding and information system to provide accurate information on the level of competition in government contracting.



## SECTION 3 - CONTRACTING OUT

### OVERVIEW

#### INTRODUCTION

In 1962, the Glassco Commission argued that the decision to "make" internally rather than "buy" from the private sector should only be made on the basis of conclusive evidence of the unavailability, on reasonable terms, of the goods and services from outside the government. This was good advice.

At least \$10 billion of annual government expenditure on services is produced internally. Not all these services are suitable for contracting out to the private sector. Those that are have the potential for generating significant benefit to the Canadian economy through increases in business opportunities, productivity improvements, and savings in government expenditures. Increasing the levels of contracting out, however, is not going to be easy. Problems include managerial attitudes, control guarantees, union perspectives, and development of the necessary private sector infrastructure to undertake the work.

Although there is no general, government-wide, contracting out policy at the federal level in Canada, specific policies have been implemented for science and technology and for electronic data processing (EDP) requirements. In addition, the Department of Supply and Services (DSS) introduced a "make or buy" policy in 1979 for their Supply Administration. This subjected government printing, publishing, expositions, equipment maintenance and repair, and in-house EDP services to "make or buy" analysis.

The study team examined these policies and their implementation to see if contracting out could be increased. The bottom line is that, quite apart from improvements to existing "make or buy" or contracting out policies in DSS or for science and technology and EDP, a government-wide contracting out policy is both feasible and desirable. The pros and cons of such a policy initiative are set out along with criteria that could be adopted, and a process to be followed, and we conclude that an important initiative is available here for government. We first review existing policy and then return to the more general discussions.



## Policy for DSS Make or Buy

In 1983-84, eleven activities representing \$392-million in business volume were subject to a "make or buy" policy. Sixty-six per cent was contracted out to the private sector under the "buy" option. The DSS 1979 policy is that if something can be bought more effectively and cheaply in the private sector than it can be made in the public sector the decision will be to buy. DSS is a "revenue dependency" department. This means it charges all other departments for its services on a full cost-recovery basis. Therefore, the "make or buy" decisions should be easy to reach. DSS has begun formal evaluations to determine the nature and extent of further contracting out opportunities.

The study team, however, identified the following problem areas:

- Management attitudes are not sufficiently supportive of contracting out. There is a conflict between the "make or buy" policy and the client service emphasis of DSS. Managers worry about loss of control and the impact of contracting out on classification levels and job satisfaction. New incentives must be devised.
- Data are not readily available to do accurate cost comparisons. These data must be generated.
- A conflict exists between "revenue dependency" and "make or buy" policies where there is need to generate revenues to help maintain minimum level in-house capability. Using excess in-house capacity for this purpose reduces possibilities for increasing contracting out to the private sector. This conflict must be resolved.
- Some departments are bypassing mandatory DSS-provided services by acquiring their own production facilities or using personal service contracts directly with suppliers. These practices must be stopped.
- Certain built-in provisions prevent the fostering of true competition between DSS-provided services and equivalent private sector facilities. For example, neither the Bureau of Management Consulting nor the Audit Services Bureau of DSS are on a full revenue dependency basis. Also, it is easier to contract in-house resources than justify a submission for private sector contracting. These situations need review.

## **Policy for Contracting Out Science and Technology**

The government spends about \$4 billion and allocates 35,000 PYs annually for scientific activity in the natural and human sciences. Studies indicate that approximately 15 to 20 per cent of the activity is contracted out to the private sector.

Current policy requires that essentially all ongoing, as well as new, science and technology requirements are to be contracted out to the private sector to the extent practicable. In-house activity, however, is not to fall below 1972 levels.

The study team found that after some initial progress, the policy has not been seriously implemented. There are specific areas in almost all departments where compliance has been excellent, but overall compliance has been poor. Levels of contracting out can only be significantly increased if the policy is revitalized and championed. Targets must be set and a process developed, along the lines set out in our approach to general contracting out. Managerial incentives must be developed.

## **Policy for Contracting Out Electronic Data Processing (EDP)**

In 1984, the government spent about \$800 million on EDP services, of which 44 per cent was for salaries. Approximately 17 per cent was contracted out to the private sector.

Treasury Board policy of 1978 requires departments and agencies to purchase EDP needs from the private sector unless it is in the public interest or is more economical to provide the services internally. Departments must also ensure that EDP support to relocated or decentralized government operations is provided through local service bureaux or facilities management contracts, in preference to the installation of new government computers.

The study team identified many areas where contracting out for EDP services would result in savings, improved government programs and the development of business opportunities. These opportunities must be exploited.

While several EDP applications require in-house management (e.g. security and intelligence, scientific work

lacking private sector infrastructure, etc.), most arguments against further contracting out were unconvincing. The focus must be placed on identification of specific projects that can be packaged for design and implementation on a turnkey basis, particularly with new and replacement EDP requirements. This view is consistent with the findings of the Task Force on Informatics.

### **General Contracting Out Policy**

The examination of the DSS "make or buy", Science and Technology and EDP contracting out policies indicated that significant benefit could be gained by extending contracting out policy to a much broader range of government activities. Government does not market the activities carried out in-house, but many of these activities have application in the private sector. This means that the enhancement of activities carried on in-house by government are often duplicated outside the government. In effect, the wheel is being re-invented, again and again. At the same time, the federal government has not considered the internal cost savings and enhanced private sector opportunities that could arise from a sensibly increased reliance on the private sector. Experiences of the U.S. and U.K. governments in the last three years are encouraging. The provincial governments of Saskatchewan and British Columbia report recent success in contracting out services previously provided by in-house resources.

Productivity improvements from contracting out are attributable to:

- competitive pressure;
- economies of scale;
- greater managerial flexibility;
- lower labour costs;
- use of productivity incentives;
- cost-conscious decision-making; and
- clear objectives and priorities.

These productivity improvements contribute to savings in government expenditures as well as to the general economy. The U.S. experience is that the contracting out analysis will often result in significant savings even when the service remains in-house. When those U.S. government activities which are of a commercial or an industrial nature were put to the contracting out test, savings of about 20 per cent resulted. Using a more conservative estimate



that only 15 per cent of Canadian government operations are amenable to contracting out, and assuming a more conservative 15 per cent cost saving, this would result in annual savings of at least \$200 million.

The improved business opportunities arising from increasing contracting out result from:

- developing private sector expertise,
- marketing to a wider audience,
- amortizing development costs over greater volume, and
- enhancing export potential.

If the private sector infrastructure to accept contracting out is not in place, it can be developed slowly.

In examining how the level of contracting out can be increased, it is important to clearly establish criteria and a process which applies these criteria in a generalized way to classes of activities. After screening out exceptions, the criteria can be further applied to specific departmental activity commencing with the areas with the highest potential for successfully increasing contracting out. Our specific views on these matters are detailed later in this report.

The implementation of an overall contracting policy needs careful thought. Experience shows that voluntary compliance does not result in significant change. A top-down approach must be organized. Managerial support must be encouraged by appropriate changes in the performance appraisal systems. Union and professional association support must be won and a sustained level of political commitment must be fostered. Because of the need for careful development of a general contracting out policy an implementation team to further investigate the costs, benefits and opportunities is required.

## **Remedial Action**

The study team believes that contracting out is a viable means of containing and reducing the costs of producing and delivering public goods and services. Although total potential savings can not be quantified, the desirability and feasibility of a vigorous contracting-out program throughout the federal government warrants serious investigation. Highlights of actions required include:



- a. the immediate formation of an implementation team to develop, with private sector advice, detailed policy and implementation plans for a comprehensive contracting out of government service, taking into account the work set out below to improve already existing contracting out policies;
- b. with regard to the improvement of DSS "make or buy" policy:
  - establish a private sector advisory group to help evaluate "make or buy" policy and advise on cost, delivery and other service criteria;
  - establish full revenue dependency for professional consulting, audit and translation services and remove any other impediments to true competition with the private sector; and
  - in certain cases, review "make or buy" policy for selected communications services, to determine whether such services need to be mandatory;
- c. with regard to the improvement of science and technology contracting out policy:
  - develop proposals to at least double the amount of science and technology activity to be contracted out, including pilot projects for the management and operation of various federal scientific establishments; and
  - remove the current policy restrictions on reducing the level of in-house scientific activity;
- d. with regard to the improvement of EDP contracting out policy:
  - focus on contracting out the entire function or program related to new and replacement EDP services; and
  - identify opportunities for contracting out via departmental long-term strategic plans for EDP activities;
- e. with regards to general implementation of contracting out policy:
  - review the current system of employee classification to ensure it does not inhibit general contracting out policy.

In terms of the specific actions necessary to improve and revitalize existing DSS, science and technology, and EDP policies, the study team stresses that there is a clear consistency with any general contracting out policy that could be developed by the implementation team. Simply put, there are immediate remedies in these areas that should not await the development of a more general policy.

## **GREATER ECONOMY THROUGH INCREASED CONTRACTING OUT**

### **PURPOSE**

To assess and recommend action for greater financial savings and expanded business opportunities through increased contracting out of government services currently provided in-house.

### **BACKGROUND**

The issue of contracting out for government services is a long-standing one. In 1962, the Glassco Royal Commission on Government Organization noted that: "Most activities and types of employment common to commerce and industry find their counterparts in government". Carrying out these activities results in expenditures by the Government of Canada on a host of goods and services. "Many of these goods and services are 'bought' in the form ultimately required; others are obtained in a raw or unfinished state and 'made' to meet the government's needs; others are acquired in almost every intermediate stage."

The Glassco Commission noted that "Ministers responsible for government programs look to their departmental officials to carry most of the responsibility for determining the means by which the programs are to be administered". In carrying out this latter responsibility, two options in many cases will be available. Decisions can be made to use the facilities of the private sector, or alternately, plant can be acquired, staff hired, and the goods or services provided internally. In reflecting on these options the Glassco Commission argued that the "decisions to 'make' rather than 'buy' should only be taken on the basis of conclusive evidence of the unavailability on reasonable terms of the goods or services from outside the government". Carrying out the policies of government in-house should be viewed as a secondary activity of government departments and officials and should only occur to the extent that it does not divert the attention of officials and Ministers from their primary function, which, in the case of Ministers, is to formulate public policy, and in the case of officials, to support this activity.

Following the release of the Glassco Report, the Department of Supply and Services (DSS) was created and in 1979, the Supply Administration component of DSS issued an

internal policy directive requiring that if something can be bought more effectively and cheaply in the private sector than it can be made within government, that the decision should be to buy. To make "buy" decisions on the basis of true economic cost comparisons with the private sector has required that all DSS overhead costs be apportioned across the range of services provided. In turn, client departments are now charged rates covering the full cost of these services.

Since introducing its "make or buy" policy, DSS has made decisions to contract out portions of major activities that had been carried out in-house, including printing, publishing, equipment maintenance and repair, and electronic data processing (EDP). These decisions were motivated by the savings in dollars and person-years that were achievable from the buy option, while maintaining service levels to clients.

DSS's Strategic Overview for 1985-86 to 1988-89 identifies additional services that will be subject to formal evaluations to determine their potential for further contracting out. They include management consulting, printing, warehousing, equipment maintenance and repair, stocked item supply, and EDP systems development and operations. DSS is also reviewing proposals solicited from private sector companies aimed at contracting out Central Travel Services (CTS). Government-wide policies were also instituted by the Treasury Board Secretariat in the mid-1970s regarding the contracting out of federal government requirements for science and technology and EDP.

While these policies have subjected a portion of government activity to the discipline of the "make or buy" analysis, there is still a large component of government activity (at least \$10 billion) not subject to it. There is some question also as to how well these policies have worked, especially for science and technology and EDP.

## **ASSESSMENT**

While there is little analysis of the savings realized through contracting out at the federal level in Canada, the experience of other jurisdictions suggests that there are substantial additional savings to be realized.

The U.S. government has a long-standing (since the mid-1950s) policy, referred to as "A-76", requiring that



its departments and agencies to rely "upon the private enterprise system to supply its needs, except where it is in the national interest for the government to provide directly the products and services it uses".

This policy has been revised several times since its inception, but it is only since 1981, following a presidential directive, that the policy has been vigorously enforced. While nominally the policy is still focused on contracting out, the emphasis now is on productivity improvement through subjecting the provision of government services to the test of "make or buy". Services are only to be provided by the private sector when it is cheaper to do so.

The rule of thumb is that for existing in-house services, unless the saving is greater than 10 per cent if the product or service were to be contracted out, the in-house service is to be maintained. For new activities, the rule is reversed, i.e., unless there is at least a 10 per cent saving by performing the activity in-house, the new activity is to be contracted out.

In many instances, following the application of this rule, activities have remained in-house, but at significant savings (better than 20 per cent on average). These savings have come about because of productivity gains realized through subjecting the in-house services to the competitive process associated with the application of A-76.

The British government instituted a government-wide contracting-out policy in the early 1980s to ensure value for money and to create new opportunities for the business community. As the policy was initially applied in a voluntary manner, few actual contracting-out decisions were taken by government agencies. In 1983, the policy was revitalized to force agencies to designate services that would be competitively tendered. The National Health Service, a pilot agency, has since demonstrated significant savings by contracting out the bulk of its cleaning, laundering, and catering services. All central government agencies are now being required to bring forward candidate activities for competitive tendering by 1986. Savings to date are about £60 million.

While examples in Canada are fewer, there is significant contracting out by municipal and provincial governments. In 1982, the new government in Saskatchewan

decided to contract out additional work in the Department of Highways and Transport and to introduce a series of productivity and efficiency improvements. During 1983 and 1984, 486 positions were abolished within the department, 370 as a result of privatization and 116 through productivity and efficiency improvements. The Employee Control Committee was set up to oversee the process of employee adjustment. Areas affected included works branch, maintenance, repair depots, engineering services, and head office. Annual savings of about 10 per cent have been realized.

Another recent example of contracting out is the case, in British Columbia, in which the affected operations were taken over by the employees themselves. Formed in 1977, British Columbia Systems Corporation (BCSC) is a Crown corporation wholly owned by the B.C. government to provide centralized EDP services to all its departments. In 1984, the government decided to contract out the facilities management portion of the BCSC operation. It invited the 130 employees involved to bid for the contract. An employee-owned company, Hi-Tech Systems Ltd., was awarded the contract in the fall of 1984.

The literature includes other illustrations of contracting out. The cost of municipal refuse collection, for example, has averaged 29 to 37 per cent higher than it would if the work were performed under contract. Studies of health insurance administration demonstrated a 35 per cent reduction in costs through contracting out with no deterioration in delivery.

The productivity improvements realized have been attributed to a number of factors including:

- competitive pressures,
- economies of scale,
- greater managerial flexibility,
- lower labour costs in some cases,
- use of productivity incentives,
- more cost-conscious management decision-making, and
- clearer operating objectives.

In addition to the potential savings that will be realized by government, the economy as a whole will also benefit from the new business opportunities that will result from contracting out. Government does not market the activities it carries out in-house, but many of these

activities have application in the private sector or in other jurisdictions. This means that the development and enhancement of activities carried on in-house by government are often duplicated outside of government and by other jurisdictions so that, in effect, the wheel is being re-invented, again and again.

However, if these types of applications were contracted out, a private sector expertise would be developed and the product so developed could be marketed to a wider audience. The development costs would be incurred only once and spread over a wider clientele, resulting in reduced costs for everyone and a more efficient allocation of resources across the economy as a whole. Where unique expertise is developed, it may also mean potential export opportunities and additional employment opportunities.

Despite attractive benefits, progress in implementing the contracting out option has been slow, even when a comprehensive policy has been put in place. This is partly because civil service unions and managers are reluctant to accept the contracting out option because of its possible threat to their future well-being. Identified disincentives to more contracting out include:

- loss of jobs and reduced union membership and revenue;
- concern over possible disruptions or deterioration in delivery of services to the public;
- fear of losing managerial control or lessening security; and
- effects on classification levels and mandates of organizations.

These have been addressed in other jurisdictions and are commented upon further below.

Suggested criteria for contracting out include:

- private sector network exists for performing these activities. For example, banks and trust companies might be a network for administering various income security programs.
- private sector network could exist. For example, more research activities could gradually be contracted out to the private sector as the capacity of industry, the professions, and universities increased.



- the marginal cost of activities can be lower, using private sector networks, than the full cost of government provided services. For example, if inspection activities can be added to an existing private sector activity, the marginal cost is likely to be less than the full cost of a government organization set up for that purpose alone.
- business opportunities or freedom to encourage initiatives, growth, new competitive services, or new markets may result from contracting out. Many activities of government are paralleled by markets internationally and nationally at other levels of government or by the private sector. If a large body of expertise is built up in the federal government, there are few opportunities to take advantage of a broader market that may be available. If government contracts out the activity, this frequently will give the contractor the expertise or economic base to offer similar or expanded services to others. Potential exists in some areas for Canada to be among world leaders if government expertise is transferred to the private sector.
- better decision-making by government might result from having a better organized, more active and professional contribution to government by the private sector. Industry and professional associations are often too narrowly focused or poorly organized to contribute to public policy-making. If they had more responsibility for providing information, self-regulation, and public policy advice, they could strengthen their organizations and ultimately contribute to better decision-making by government.
- better service to the public may result if private sector networks are closer or more responsible to the public and are in a better position to integrate the delivery of a variety of services. They may be closer geographically, already providing related services, or more closely connected to the community.

Contracting out government services is likely to involve the following process:

- identifying the private sector networks that might perform each government activity, assessing their capabilities (both strengths and weaknesses) and analyzing the benefits and risks of transferring responsibility to those networks; and



- starting the process of planning and negotiating a gradual transfer of responsibility, focusing on:
  - encouraging the build-up of private sector capability;
  - ensuring that private sector participants have appropriate, responsible networks and objectives;
  - entering into the appropriate social contract; and
  - establishing the appropriate effectiveness, reporting, regulatory, and audit arrangements to protect the public interest.

There is probably no simpler way than contracting out to decrease the size of government or reduce its interventions in the economy. If it is intended to follow up on the major theme of Glassco, the role of government is to govern, not to deliver services, and the civil service should primarily be helping parliamentarians make the trade-offs and set priorities. To implement contracting out would involve analysis on an activity basis. A major shift in contracting out would have to occur gradually over a 5 to 15-year period.

Applying the criteria and the process provides a road map of how to tackle the contracting-out maze. Other approaches, such as the U.S. focus on commercial or industrial type activities (CITA), are available. (See Appendix A for examples of CITAs.) The following matrix applies the criteria in a generalized way to classes of government activities, before applying them to specific activities in each department. One would start with the easiest activities first and work down to the most difficult. The matrix:

- assumes that government activities fall into about eight major classifications; and
- using the above criteria, the desirability and feasibility of contracting out can be identified using the designation H = High, M = Medium, L = Low.

Based on the matrix:

- the highest potential for contracting out would likely be in the income security and administrative support areas; and

- the lowest potential for contracting out would be in the military/policing areas (but this would not include administration and support activities).

Criteria	NEW BUSINESS NETWORKS TO MAKE PUBLIC					
Government Activities	NETWORKS	NETWORKS	LOW COSTS	OPPORTUNITIES	BETTER DECISION- MAKING	BETTER SERVICE TO PUBLIC
Inspection	M	H	L	M	M	M
Institutional	M	H	L	H	L	H
Research	L	H	H	H	M	M
Information	L	M	L	H	H	M
Income Security	H	H	H	H	H	H
Regulation/Policy Setting	M	H	L	H	H	H
Military/Policing	L	L	L	L	L	L
Administrative	H	H	M	H	H	H

Based on this general process a strategy for contracting out government activities could be developed.

Appendix B illustrates a preliminary, unresearched application of this concept to the department of X, as an example. It shows that in theory there is potential for a 74 per cent decline in staff over 15 years assuming that more and more of their activities would be contracted out to the private sector each year. While such a theoretical exercise would come up against the realities and constraints noted above, it does illustrate the potential of applying a contracting-out strategy on a major basis.

There is no simple way to determine in advance the full scope or potential benefits of a government-wide contracting out policy. Nonetheless, there is clearly scope for contracting out additional federal government activities. In the area of real property management, for example, over 80 per cent of design, construction, operation, and maintenance staff are involved in activities that could be contracted out. This would involve some 18,000 person-years of employment. If the savings even approached the 20 per cent realized in the U.S. experience, this would represent a significant improvement in government economy.

While it has not been possible in the time given to the study group to estimate the potential savings from introducing a general contracting out policy, it is possible to speculate regarding orders of magnitude. For example, one could imagine a general contracting-out policy resulting in an additional 20 per cent (\$2 billion) of government activities being contracted out. If even a 10 to 15 per cent saving were realized, it would mean a \$200-\$300 million annual reduction in the cost of providing government services.

There are a number of considerations in deciding on the feasibility of a government-wide contracting-out policy. First, it is clear from American and British experience that requiring only voluntary compliance with a contracting-out policy forestalls any meaningful performance by government agencies. Accordingly, it will be imperative that as much or more emphasis be placed on the implementation of the policy as on its design.

Second, although the policy should be vigorous, it should not be punitive. In fact, the best means of ensuring compliance and performance is to offer appropriate incentives to all affected. The job descriptions of managers and the performance appraisal and bonus systems

could be adjusted to reflect an increased emphasis on contracting out.

Third, it will be important to gain the support of the unions and various professional associations. One option might be to require private suppliers to provide government employees with a right of first refusal for new job openings arising from contracting out. The Supreme Court ruled in July 1979 that when a group of public service employees migrates to the private sector, as may result from a contracting out decision, they should continue to be represented by their existing public sector union. Union concerns on this point would have to be included in contracting out policy and implementation plans.

Fourth, considering the experience elsewhere in implementing a government-wide contracting out policy, a high and sustained level of political commitment will be crucial to the achievement of the type of savings previously identified. A major contracting out thrust could be combined with other possible cost-reduction proposals such as Crown corporation privatization, the extension of cost-recovery practices, deregulation, and regulatory reform under an overall program theme related, for example, to reducing the government deficit and revitalizing the Canadian economy. Effective communications would be required to generate early understanding and continued support by the general public, industry, and the provinces.

It will be important, therefore, to give careful consideration to the formulation and implementation of a general contracting out policy. Given the potential resistance to such a policy it will be important to ensure, from the outset, that the development and implementation of the policy does not get lost in the bureaucracy.

In view of the study team, therefore, consideration should be given to establishing an independent group to develop the policy and bring forward recommendations regarding its implementation. This group should be established as quickly as possible and it could be asked, for example, to report early in 1986.

Conclusions: As a method of public administration, contracting out has proven to be a viable means of containing and reducing the costs of producing and



delivering public goods and services. Savings in excess of 20 per cent are not infrequent.

Even if potential savings at the federal level are unclear at this time, the desirability and feasibility of a vigorous contracting out program warrants serious investigation.

## **OPTIONS**

The study team recommends to the Task Force that the government consider developing a comprehensive contracting out policy for government be developed and, as a transitional measure, establishing a fully dedicated team to make recommendations on detailed policy and implementation plans for comprehensive contracting out of government services, and to this end,

1. a private sector group be established to provide advice to this team,
2. each department nominate an official as a point of contact, within one month of the RD, to provide information to the team,
3. an examination take place of the current system of employee classification and pay so that it does not inhibit general contracting out policy
4. to ensure consistency in the development of the policy, the team consult with those officials of DSS and TBS who are responsible for implementation.

## APPENDIX A

### EXAMPLES (TITLES ONLY) OF COMMERCIAL ACTIVITIES<sup>1</sup>

Audiovisual Products and Service  
Automatic Data Processing  
Food Services  
Health Services  
Industrial Shops and Services  
Maintenance, Overhaul, Repair, and Testing  
Management Support Services  
Manufacturing, Fabrication, Processing,  
Testing, and Packaging  
Office and Administration Services  
Other Services  
Printing and Reproduction  
Real Property  
Security  
Special Studies and Analysis  
Systems Engineering, Installation, Operation,  
Maintenance, and Testing  
Transportation

- 
- 1 This list should be used in conjunction with the policy and procedures of Circular A.76 to determine an agency's commercial and industrial activities inventory. It has been compiled primarily from examples of commercial activities currently contracted or operated in-house by agencies. It should not be considered exhaustive, but should be considered an aid in identifying commercial activities. For example, some federal libraries are primarily recreational in nature and would be deemed commercial activities. However, the National Archives or certain functions within research libraries might not be considered commercial activities. Agency management must use informed judgement on a case-by-case basis in making these decisions.

# Appendix B

● = High    ○ = Medium    ○ = Low

MINISTRY/ ACTIVITIES	ACTIVITY TYPE										TIMING (YEARS)	PERSON-YEARS		PHASE-OUT		
	INSPECTION	INSTITUTIONAL	RESEARCH	INFORMATION	INCOME SECURITY	REGULATION/POLICY-SETTING	MILITARY/POLICING	ADMINISTRATIVE/SUPPORT	NETWORK EXISTS	NETWORK COULD EXIST		1985-86	% REDUCTION	1986-91	1991-97	1997/200
<b>ADMIN. PROG.</b>																
Mgm't. Admin.											5	866	75%	250	200	200
Info. Services											5	76	80%	60	—	—
Strategies P & E											4	26	4	—	—	—
<b>DEVELOPMENT</b>																
Mgm't. & Admin.								*	●	●	●	998	70%	300	200	200
Research on Resources			*		*			●	●	●	5	302	50%	50	—	—
Research on Production		*	*		*			●	●	●	15	2,589	80%	800	800	80
Research on Distribution				*	*			●	●	●	5	128	80%	100	—	—
Market Development & Economic Analysis				*	*			●	●	●	15	268	50%	45	45	45
Regional Policy				*	*			●	●	●	15	216	50%	35	35	35
Assistance				*				●	●	●	5	22	80%	16	—	—
Stabilization Program					*			●	●	●	5	103	80%	80	—	—
Rehabilitation								●	●	●	10	881	80%	350	350	—
<b>INSPECTION</b>																
Mgm't. & Admin.								*	●	●	5	340	60%	100	50	50
Research & Advisory				*				●	●	●	10	397	50%	100	100	—
Maintenance	*							●	●	●	10	1,114	50%	228	228	—
Inspection — Outside	*							●	●	●	10	976	50%	250	250	—
Inspection — Inside	*							●	●	●	5	1,371	80%	1,097	—	—

● = High    ● = Medium    ○ = Low														
ACTIVITY TYPE		BENEFITS							TIMING	PERSON-YEARS		PHASE-OUT		
									(YEARS)	1985-86	% REDUCTION	1986-91	1991-97	1997/200
MINISTRY/ ACTIVITIES	INSPECTION	INSTITUTIONAL RESEARCH	INFORMATION	INCOME SECURITY	REGULATION/POLICY-SETTING	MILITARY/POLICING	ADMINISTRATIVE/SUPPORT	NETWORK EXISTS	NETWORK COULD EXIST	LOWER MARGINAL COST	LEVERAGE OR FREEDOM	BETTER DECISION-MAKING	BETTER SERVICE TO THE PUBLIC	
	PROGRAM													
	Admin.							○ ● ○ ○ ○ ○ ○	5	22	30%	7	—	—
	Ops							● ● ● ● ○ ○	5	74	80%	60	—	—
	Research							○ ○ ○ ○ ○ ○ ○	5	7	0%	—	—	—
	COMMISSION													
	Admin.						● ● ● ○ ○ ○ ○	5	43	30%	13	—	—	—
	Inspection	●						● ● ● ● ● ○	5	425	80%	325	—	—
	Processing	●						● ● ● ● ○ ○	5	245	80%	175	—	—
	Testing		●					● ● ○ ● ○ ○	5	97	80%	80	—	—
Economics & Statistics			●				○ ● ○ ● ○ ○	5	100	50%	50	—	—	
TOTAL									11,296	73%	4,671	2,258	1,320	



## **DSS: "MAKE OR BUY" POLICY**

### **PURPOSE**

To review the implementation of the "make or buy" policy primarily within the Department of Supply and Services (DSS), and to determine whether or not there is scope to expand the application of the "buy" option with respect to DSS and other common service organizations.

### **BACKGROUND**

The mandate of DSS is to:

- plan and organize the provision of material and related services to departments and agencies; and
- determine how services will be provided to meet the needs of clients. In support of this objective, DSS (Supply) is responsible for the acquisition stage of procurement which includes the tendering and contracting process. At the same time, for some procurements, specific socio-economic benefits must be considered. In addition, where applicable, DSS must decide whether the good or service should be contracted out or made in-house.

DSS is in an ideal position to promote the government's intent to rely more heavily on the private sector for needed goods and services. The aim is to reduce government spending by reducing personnel levels and streamlining administration.

DSS policy issued in 1979 states that, if something can be bought for less in the private sector than it can be made within government, the decision will be to buy.

The discipline of "revenue dependency" with its requirement for a clear statement of all costs, both direct and indirect, is the key to making "buy" decisions on the basis of a real economic cost comparison with the private sector.

Since promulgation of its "make or buy" policy, DSS has contracted out portions of major activities that previously had been carried out in-house, including printing, publishing, equipment maintenance and repair, and internal

electronic data processing (EDP). These decisions were based on the savings in dollars and person-years (PYs) achieved by the "buy" option, while maintaining service levels to the client.

DSS's Strategic Overview (1985-86 to 1988-89) identifies several services that will be evaluated to determine further contracting out opportunities. These include management consulting, printing, warehousing, equipment maintenance and repair, stocked item supply, and EDP systems development and operations. DSS is also reviewing proposals solicited from private sector companies aimed at competition in contracting out of Central Travel Services (CTS).

## **ASSESSMENT**

Extension of Application: Some DSS services contain "buy" elements of varying proportions. Appendix A presents a synopsis of two functions, printing and equipment maintenance and repairs, and the extent to which they are contracted out. An overview of all activities is provided in Table 1.

Several other activities carried out within DSS have not been governed by "make or buy" decisions, including financial and personnel services provided on an optional basis to client departments. The cost of these services is approximately \$22 million a year and 400 PYs. Efforts to ensure that such services are delivered efficiently and economically have focused on centralization of these activities, which currently are spread among many departments. It is noted, however, that prior to January 8, 1985, these services were provided by the Services Administration of DSS but were not governed by the DSS (Supply) "make or buy" policy. They were also not on revenue dependency.

Decisions to contract out functions appear to be guided less by the DSS "make or buy" policy, than by the tendency of activity managers to service clients in a timely manner.

Although the DSS "make or buy" policy directs that the delivery of services be based on full-cost evaluations, there is no documentation to indicate that such evaluations have been carried out when there is a significant change in the operation (i.e., increases or decreases in business

volumes) or on a periodic basis (i.e., every five years). No data are available to accurately disclose the difference between the cost that DSS incurs in providing certain services and the cost that would result from having such functions performed by the private sector.

The tendency of DSS activity managers to place greater emphasis on qualitative priorities rather than quantitative cost data is partially the result of both client pressures and the client service orientation set forth in DSS policy documents. A consensus among DSS clients ranks timeliness and quality over cost in the delivery of services. Quality concerns are critical in service delivery, but because they are subjective, they must be assessed in conjunction with quantitative data, especially if management is to decide how best to deliver services.

Constraints: the most common arguments, cited by the providers of services, against significantly greater contracting out of certain functions parallel those identified by Glassco in 1962 and focus on the need to maintain a core establishment:

- to assess the prices and quality of product received from the private sector;
- to ensure a continued ability to provide key services in the event that the private sector cannot or will not because it is no longer profitable to do so;
- to protect the government from unwarranted price escalation in a market in which competition is limited.

These arguments can be challenged. Competitive market forces and contractual safeguards should provide protection from potential abuses. Recent studies by the U.S. General Accounting Office (GAO) pertaining to the U.S. Government A-76 (Contracting Out) Policy, indicated that contractors do not initially "buy-in" and subsequently raise their prices.

The key to sound contracting out is similar to that for sound in-house management: a clear statement of performance work requirement and a quality assurance plan. It may be easier to deal with any problems resulting from contracting out as they arise rather than continually seek the most appropriate level of in-house production capability.

**TABLE 1**  
**CONTRACTING OUT REVIEW**

DSS Activity	Person- Years (PYs)		Business Volumes (\$000)					
			80/81			83/84		
	80/81	83/84	Total (\$000)	Contracted Out (\$000)	%	Total (\$000)	Contracted Out \$000	%
1. Printing	1185	1099	152,216	102,092	(67)	199,746	133,262	(66)
a)Head- quarters								
b)Regions	236	223	17,478	6,347	(36)	28,383	14,077	(49)
<b>TOTAL</b>	1421	1322	169,694	108,439	(63)	228,129	147,339	(64)
2. Equipment Maintenance/ Repair	61	58	5,553	3,447	(62)	7,151	4,526	(63)
3. Management Consulting	132	150	10,769	4,598	(43)	17,524	8,032	(46)
4. Audit	420	386	16,162	608	( 4)	17,243	712	( 4)
5. EDP Systems Development (Supply)	8	7	1,544	1,200	(78)	1,325	960	(72)
6. EDP Computer Ops. (Supply) (See Note 1)	2	2	1,827	1,827	(100)	3,965	3,965	(100)
7. EDP Systems Maintenance & Enhancement	39	42	1,685	515	(30)	1,897	484	(25)
8. Expositions	—	120	—	—		24,400	17,015	(70)
9. Advertising	—	14	—	—		68,000	68,000	(100)
10. Publishing (Sales) (See Note 2)	—	132	—	—		12,000	1,920	(16)
11. Photo/Video Centre	—	73	—	—		10,215	7,150	(70)

**Notes** 1. A major in-house facility was phased out as of October 1, 1977 and applications converted to private sector service bureaux. This resulted in savings of \$1.15 million and over 94 PYs (e.g., from 133 PYs in 1975-76 to 39 PYs in FY 1977-78)

2. Certain activities are operated on a full cost-recovery basis while others, such as management consulting and audit services, receive a partial subsidy.



Because promoting the "buy" option is not an integral part of performance assessments, no incentives are provided for managers to advance such opportunities. In fact, the opposite is true. Contracting out is seen as reducing the degree of control a manager has over operations for which he is directly accountable. In DSS, this has resulted in overly large administrative units to control the contracted out business. Further, PY reductions stemming from contracting out of functions is perceived as a threat to existing classification levels.

A serious limitation to further contracting out of DSS activities is the conflict between DSS's revenue dependency and "make or buy" objectives in conducting some of its operations.

For some commercial services, a certain level of in-house capability has been maintained irrespective of whether this is more costly than private sector services. Such decisions, for example, have been made in respect to printing, where certain requirements are provided for in-house (e.g., parliamentary papers) because of the need for quick turnaround and security.

Maintenance of an in-house production capability often entails a minimal resource allocation but often results in a capacity to produce more than is required. Decisions must then be made whether to allocate other work to in-house facilities to ensure efficient operation, or to contract the work out where it can be procured more cheaply from private sources.

The former route assists in-house operations in recovering costs through increased revenues but limits contracting out opportunities. Unless there is a clearly articulated policy, the "make or buy" objective will continue to be seriously constrained.

The ability of DSS to ensure that, to the largest extent possible, certain government services are provided by the private sector, is further impaired by the failure of other departments to abide by the TB Common Services Policy. Departments are bypassing DSS for many of the services for which DSS is designated as the mandatory provider by acquiring their own equipment and establishing production facilities and by contracting directly with suppliers through the use of personal services contracts.

In the first case, departmental facilities rarely are run on a user-pay basis. Costs are generally buried in the operating costs of departmental programs.

In the second case, the private sector is involved, but such actions inhibit "make or buy" decisions based on a full identification of the government requirements and sound assessment based on cost, service, etc.

It is estimated that the portion of government requirements bypassing DSS ranges from 5 to 10 per cent (\$10 to 20 million) in printing, to over 50 per cent (\$3.5 million) in the maintenance and repair of office equipment.

Appendix B details the extent to which departments and agencies have established their own video production facilities, thus bypassing the services provided by the Canadian Government Film and Video Centre.

Potential for Increasing the "Buy" Option: Over the spectrum of DSS services, it would appear that, in some, only incremental increases to the current "buy" component are possible, while in others the "buy" option can be significantly increased with the possibility of complete privatization of certain functions. Functions in the first group include printing, publishing, expositions, film, video and photographic services; those in the latter are management consulting, equipment maintenance and repair, financial and personnel services, audit services, stock item supply, warehousing, and disposal services.

In lieu of presenting hard assessments as to the degree the "buy" option should be employed in the delivery of DSS provided services, actions will be suggested to maximize use of this option.

Establishment of a Formal Evaluation Mechanism: DSS should implement a more formal system of evaluating the provision ("make or buy") of its services. One of the major difficulties encountered in assessing the delivery of DSS services is the lack of objective, comparable cost data for the "make or buy" and administrative aspects of its services. As policy, DSS should ensure that its operations are evaluated every three to five years through the establishment of a joint DSS-independent party review mechanism. This would ensure that contracting out decisions are made on a consistent and objective basis in accordance with established guidelines.

These reviews should be conducted by a team of representatives from the service being reviewed, other DSS organizations, and independent bodies (i.e., major clients of service, suppliers, and central agencies).

The establishment of a formal evaluation mechanism would deal with the problem of making appropriate trade-offs between cost and service-level factors when determining the optimum method of delivering certain functions.

**Fostering True Competition:** In some cases, the professional service functions carried out by DSS organizations, such as the Bureau of Management Consulting (BMC) and the Audit Services Bureau (ASB), duplicate existing and well-established private sector capability. However, with both management consulting and audit, there may be an expertise present within government that is not available in the private sector, and cost considerations may favour conducting such activities within government. This cost criterion is the major argument used by in-house providers of such services in favour of continuing the practice.

Since such in-house professional services are provided to departments on an optional basis under the fee-for-service approach, the providers of such services believe that they operate in a competitive environment (i.e., that departments choose the in-house source over the private sector because of lower cost and equal or better quality). In reality, however, these services have enjoyed advantages over the private sector in competing for the professional service needs of departments. The principal advantages are subsidy of costs and ease of contracting.

**Subsidy of Costs:** Although BMC and ASB operate on a system of revenue dependency which guides their rate-setting, they have not been assessed certain costs of operation. Such costs include accommodation, interest charges on working capital, and employee fringe benefits. These costs have been offset by monies from the Services Administration Appropriation. As a result, these services have been set at artificially low rates, giving them a distinct advantage over rates charged by the private sector.

In respect to the cost advantage, DSS intends to place its management consulting and audit services functions on full revenue dependency by April 1, 1986. This will assist in making accurate assessments regarding the cost of



in-house provision of such services and the costs that would be incurred in acquiring these services from private sector sources.

Ease of Contracting: TB contracting regulations require that, for the acquisition of professional services from the private sector, formal TB submissions are required for services in excess of \$25,000. This regulation does not apply to those requirements sourced by departments from both BMC and ASB. As a result, departments may choose in-house provision of services over private sector firms to avoid making formal submissions seeking approval of their requirements.

A fundamental question remains as to the continued need to provide such services within government. BMC, for example, handles only 5 per cent of the total government consulting business, half of which it contracts out to the private sector. The greatest purchaser of BMC services is the Canadian International Development Agency (27.5 per cent of BMC business). The remaining 72.5 per cent is scattered among 58 agencies and departments. In view of this small market share, the private sector could assume this business without jeopardizing the consulting needs of departments and agencies.

It has not been possible to provide a definitive answer on whether an in-house government consulting and audit facility should exist. We suggest that DSS, private sector firms and central agencies assess the rationale for maintaining these professional services in-house, and present their findings to TB. The review should examine the various options of meeting needs, including maintaining the status quo, decreasing in-house operations to the minimum required, and adopting full reliance on the private sector for such services.



## OPTIONS

The study team recommends to the Task Force that the government consider the following measures:

- a. establish a private sector advisory body to assist in its periodic evaluation of the implementation of its "make or buy" policy, by providing advice on cost, delivery, and other service criteria that are elements of the decision whether to "make or buy";
- b. remove all advantages over their private sector competition which the government's professional consulting and audit services now have and establish full revenue dependency for such services within five months of the Record of Decision.

## APPENDIX A

### Equipment Maintenance and Repair Service

The Equipment Maintenance and Repair Service (EMRS) of DSS is a mandatory common service offered to all government departments, agencies and selected customers. It arranges for the repair, preventive maintenance and evaluation of government-owned office equipment, machinery and furniture. Service is provided through seven regional offices whereby clients are assigned to either a DSS technician or a private contractor.

In 1983-84, 94 clients were provided services; the ten largest represented over 65 per cent of the total billings made by EMRS (\$3.6 million out of \$5.5 million).

Private sector contractors were utilized in 49 per cent of these calls. This is in line with the year average of 50.9 per cent of calls handled by private contractors. Most private sector calls (93 per cent) fell in the equipment repair category. DSS technicians performed the remaining 51 per cent of calls, of which 60 per cent were for repair, 28 per cent for equipment evaluation, 6 per cent for preventive maintenance and 6 per cent for "other".

Since 1975-76, the number of DSS technicians has been cut from 42 to 28. This reduction is due to a combination of contracting out and a decline in business volumes, from 270,000 calls in 1975-76 to 112,000 in 1983-84.

Over the 1975-76 to 1983-84 period, the number of administrative staff decreased by only two PYs from 33 to 31. In 1975-76, EMR was able to handle twice the workload using a manual billing system than it did in 1983-84 with an automated system.

The following analysis shows the PYs saved from contracting out EMR's business in 1980-81 and 1983-84:

1980-81 (\$000)

Total number of repair calls = 150,725

No. of calls done by DSS technicians = 58,248

DSS calls per PY =  $\frac{58,248}{61.08} = 954$

For contracted out  $\frac{92,477}{954} = 97$  PYs

1983-84 (\$000)

Total number of repair calls = 111,991  
No. of calls done by DSS technicians = 58,497  
DSS calls per PY =  $\frac{58,497}{58.50} = 1,000$   
For contracted out  $\frac{53,494}{1,000} = 53$  PYs

### Printing Service

Government printing requirements are met in two ways - the "make" printing performed in the main DSS plant (Hull, Quebec) and in branch plants and copy centres across the country, and the "buy" component which distributes federal printing requirements to the private sector in Canada on a competitive basis.

A decade ago, over 60 per cent of the government printing requirement was "made" in-house, with 40 per cent going to the private sector. This relationship has now been reversed. DSS has established the 60/40 "buy/make" ratio as a departmental goal, and a policy guideline is currently being revised to ensure its continued attainment. In respect to savings generated from the "buy" option, the following is an illustration of the PYs that would be required to produce the "buy" business volume in-house:

1980-81 (\$000)

Selling value of production per DSS PY  
=  $\frac{\$17,478 - \$6,347}{236.13} = \$47.1$   
For contracted out  $\frac{\$6,347}{\$47.1} = 135$  PYs

1983-84 (\$000)

Selling value of production per DSS PY  
=  $\frac{\$21,666 - \$10,746}{223.21} = \$48.9$   
For contracted out  $\frac{\$10,746}{\$48.9} = 220$  PYs

Applying such an analysis to the total DSS printing business provided through the "buy" option indicates that to do this business in-house would require 2,400 PYs.

## LISTING OF GOVERNMENT AUDIO-VISUAL (AV) FACILITIES

DEPARTMENT	RESOURCES		PRODUCTION STUDIO	STUDIO INPUT <sup>1</sup>	OTHER A/V EQUIPMENT <sup>2</sup>	Comments <sup>3</sup>
	STAFF	EQUIPMENT				
1. MAJOR FACILITIES						
Health and Welfare	8	Unknown	Yes	B.I.C.	SS/Dub	Most public information produced through Canadian Government Film Video Centre or contract (\$60K) in Rigaud, Quebec. Public information products contracted out (\$75K)
Revenue Canada - Customs & Excise	8	\$700K	Yes	B.I.C.	Dub	Major training facility collocated with training centre in Rigaud, Quebec. Public information products contracted out (\$75K)
House of Commons	7	\$750K	Yes	B.I.C.	Dub/S	Some contracted out work (\$50K)
Transport Canada	19	\$1 M	Yes	B.I.C.	Dub/S	Major training facility primarily for audio-visual administration recently expanded for all of Transport. Some public information programs contracted out (\$445K).
Canada Mortgage and Housing Corporation	7	\$100K	No	E.F.P.	SS	
National Research Council	Unknown	\$250K	No	E.F.P.	Film	NRC has a number of facilities for use as part of their research programs. Most public information work contracted out



## LISTING OF GOVERNMENT AUDIO-VISUAL (AV) FACILITIES (Continued)

DEPARTMENT	RESOURCES STAFF	EQUIPMENT	PRODUCTION STUDIO	STUDIO INPUT <sup>1</sup>	OTHER A/V EQUIPMENT <sup>2</sup>	Comments <sup>3</sup>
<b>2. MEDIUM PRODUCTION FACILITIES</b>						
Canada Post	4	\$50K	No	B.I.C.	SS	CIDA uses its in-house production facilities to produce briefing packages for overseas cooperants. Public information programs produced by private sector (\$500K)
Canadian International Development Agency			Unknown			
C.E.I.C.	5	\$600K	Yes	B.I.C. E.F.P.	SS/Dub	
Energy, Mines and Resources	4	Unknown	No	I.C.	Dub/SS	Use of in-house facility limited to dubbing and exhibit A/V. Large contracting out for public information (\$500K)
Supply and Services Canada	6	\$350K	Yes	B.I.C. E.F.P.	Dub	Until April 1, 1985, used as training resource for Services Administration. The studio now is on cost recovery and provides service to all departments, specializing in low-cost operational training videos. Sales for 1985-86 projected at \$350K
Parks Canada	5	Unknown	No	I.C. E.F.	Dub/SS	Facilities located in regions - used to update in A/V's. Large contracting out program for the Parks Canada Centennial (1985, \$2M)

## LISTING OF GOVERNMENT AUDIO-VISUAL (AV) FACILITIES (Continued)

DEPARTMENT	STAFF	RESOURCES EQUIPMENT	PRODUCTION STUDIO	STUDIO INPUT <sup>1</sup>	OTHER A/V EQUIPMENT <sup>2</sup>	Comments <sup>3</sup>
Indian and Northern Affairs	4	Unknown	No	I.C.	Dub/SS	Limited use facilities (\$385K)
National Museum of Man	5	Unknown	Yes		Dub/SS	
Solicitor General	5	\$250K	Yes	B.I. E.F.P.	SS	(\$25K)
<b>3. MINOR FACILITIES</b>						
Agriculture Canada			Yes	E.F.P.	SS/Film	Limited use facilities (\$110K)
Consumer and Corporate Affairs			Yes	Unknown		Limited facilities (\$100K)
Fisheries and Oceans		\$25K	No	I.C.	S	Limited facilities (\$190K)
External Affairs	1		Yes	I.C.	Dub	Limited facilities (\$1M)
Regional Industrial Expansion	5	\$100K	Yes	I.C.	Dub/SS	(\$385K)
Office of the Auditor General	2	\$100K	No	B.I.C.		Internal training facilities
Statistics Canada			Unknown			
Secretary of State	2	No			SS	Small in-house slide production unit (\$417K)

## LISTING OF GOVERNMENT AUDIO-VISUAL (AV) FACILITIES

DEPARTMENT	RESOURCES		PRODUCTION STUDIO	STUDIO INPUT <sup>1</sup>	OTHER A/V EQUIPMENT <sup>2</sup>	Comments <sup>3</sup>
	STAFF	EQUIPMENT				
4. SPECIAL USE FACILITIES						
RCMP	9	\$800K	Yes	B.I.C. E.F.P.	SS/Dub	Major security training centre for sensitive training and operational requirements
National Defence			Yes	B.I.C. E.F.P.	SS/Dub Film	Major operational unit of the Forces for use as training facility. Production restricted to operations. Other work contracted out (\$1.3 M)
Public Archives	22		No	B.I.	Dub	National Film Archives program for the creation of a video archive of Canadian films. Not in production.
TOTAL	128 PYS	\$5.075M				
<hr/>						
1B = Broadcast						
I. = Industrial						
C. = Consumer						
E.F.P. = Electronic Field Production Video						
			2SS = Sound/slide production S = Slide production Dub = Dubbing facility (video) Film = Film production		3 Figures in parentheses indicate volume of production service contracted for by the Film and Video Centre in 1984-85	

<sup>1</sup>B = Broadcast  
<sup>1</sup>I. = Industrial  
<sup>1</sup>C. = Consumer  
<sup>1</sup>E.F.P. = Electronic Field Production Video

<sup>2</sup>SS = Sound/slide production  
<sup>2</sup>S = Slide production  
<sup>2</sup>Dub = Dubbing facility (video)  
<sup>2</sup>Film = Film production

<sup>3</sup> Figures in parentheses indicate volume of production service contracted for by the Film and Video Centre in 1984-85

## **SCIENCE AND TECHNOLOGY: CONTRACTING OUT POLICY**

### **PURPOSE**

To assess how well the policy for contracting out the federal government's requirements for science and technology has worked, and to propose changes in the policy and its implementation.

### **BACKGROUND**

In response to recommendations from, among others, the Science Council of Canada, the Lamontagne Senate Committee on Science Policy and the Glassco Commission, the federal government in 1972 adopted a policy to encourage the contracting out of government research and development. This policy required that all new mission-oriented research and development in the natural sciences should be contracted out to Canadian industry.

In 1974, the policy was extended to cover unsolicited proposals from the private sector in support of government science objectives. As well, contracting out procedures were centralized within the Department of Supply and Services (DSS). To streamline DSS's responses to unsolicited proposals, the Unsolicited Proposals Program was put in place as an adjunct to the contracting out policy. This program provides bridge financing, so that departments whose budgets are fully committed can respond in a timely fashion to proposals submitted by private industry. This program has been fairly successful and the study team on Services and Subsidies to Business has proposed that it should be retained more or less as is. Therefore, it will not be examined further in this review.

Following an initial evaluation in 1976, the contracting out policy was expanded to cover ongoing, as well as new science and technology requirements; related scientific activities; science and technology requirements in the fields of urban, regional and transportation studies; and unsolicited science and technology proposals to meet any priority government requirement.

Since 1976, there have been no subsequent changes or amendments to the policy.



The Policy: The objective of the contracting out policy for science and technology states that: "The government recognizes that science and technology are vital to the physical and social structure of Canada and, if wisely fostered and used, can provide desirable future options for Canadians. Since the government has many science and technology requirements to meet in support of departmental missions..., its policy of contracting out requirements reflects its belief that it is in the national interest to encourage the fullest possible participation of Canadian industry in meeting these needs..."

In 1984-85, the government's total budget for scientific activity in the natural and human sciences was \$4 billion. Of this sum, approximately 80 per cent was accounted for by federal departments and agencies, and 20 per cent by university granting councils (see Appendix A). Five departments and agencies - National Research Council (NRC), Department of the Environment (DOE), Energy, Mines and Resources (EMR), Department of Agriculture (DOA), and Fisheries and Oceans (F&O) - accounted for just under 50 per cent (\$1.9 billion) of the total.

Of the \$4 billion, \$771 million went to the social sciences. Statistics Canada, whose total budget is entirely devoted to this field, accounted for approximately one-third of this expenditure (\$250 million). The Social Sciences and Humanities Research Council and the National Museums of Canada were allocated \$57 million and \$53 million respectively.

In total, the federal government employs about 35,000 people in scientific activities, a number that has grown only slightly since 1979-80 (see Appendix A). Environment Canada leads the way, employing just under 5,000, followed closely by Statistics Canada with 4,600 employees. Agriculture Canada is next with just under 4,000 employees, followed by the National Research Council with 3,500. Of the total 35,000 engaged in scientific activity, just over 25,000 are involved in the natural sciences and just under 10,000 in the social sciences.

## **ASSESSMENT**

Basic research and development (R&D) is creative work undertaken systematically to increase knowledge. Related scientific activities complement and extend R&D by

contributing to the generation, dissemination and application of scientific and technological knowledge. Based on these definitions, 75 per cent of financial resources and 65 per cent of human resources in the natural sciences are allocated to basic R&D. In the social sciences, 18 per cent of financial resources and 7 per cent of human resources are allocated to basic R&D. No doubt this reflects at least in part, differences in the types of enquiry in these two areas.

In the natural sciences, fully 40 per cent of government expenditures support extramural activity, while in the social sciences, only 21 per cent of expenditures support such activity. In the natural sciences, 45 per cent of R&D and 25 per cent of related scientific activity are accounted for by extramural expenditures and in the social sciences, 58 per cent of R&D activity and 13 per cent of related scientific activity go to extramural expenditures. This supports the notion that much of the work that is contracted out is mechanical, often involving data collection, testing, or basic analysis, and that the more innovative and challenging, and by implication satisfying, work is retained in-house.

**The Extent of Contracting out:** There have been only two formal assessments of the contracting out policy for science and technology. The first resulted in the extension of the policy's application in 1976. A more recent assessment, also conducted by the Ministry of State for Science and Technology (MOSST) in 1982, found that contracting out in the policy's early stages grew as a proportion of total expenditures on scientific activity - from 6.3 per cent in 1970-71 to 15.1 per cent in 1977-78, but that it levelled off subsequently. More recent information suggests that this has not changed appreciably. This same fact was also noted in the 1981 Auditor General's Report, suggesting that there was an initial favourable response to the policy's goals and objectives.

If all extramural expenditures (support programs and contracts) are considered, the results are somewhat different. Extramural expenditures, as a percentage of total expenditures for R&D and related scientific activity, remained relatively fixed over the same period, varying between 38 and 42 per cent. Thus, from a global perspective, the increase in contracting out by the federal government was offset by an almost equal reduction in the value of contributions for scientific and related activities.

If a very narrow view is taken then, the policy was effective at least in its early stages. However, if the effect of the policy in the context of the government's total extramural expenditures on R&D and related scientific activity is considered, its effectiveness would appear, at best, ambiguous.

The policy's current status is also somewhat in question. There appears to be a general apathy towards its continued vigorous implementation. While it is paid lip service, there appears to be a lack of enthusiastic support for its direction. For example, departments are to provide MOSST with an annual scientific and technology procurement plan. This is not being done. The 1981 Auditor General's Report noted that in 1978 only nine departments submitted plans, and in 1979, only one.

Attempts to give the policy some teeth met with little success. MOSST made several proposals to encourage departments to follow the contracting-out policy, but although some negotiations took place between MOSST, Treasury Board and departments, no further action was taken. In 1982, MOSST's evaluation of the policy was submitted to Treasury Board, but there has been no follow-up to date.

The recent report of the Task Force on Federal Policies and Programs for Technology Development (Wright Report) also concluded that the application of the policy had been spotty. It noted, too, that the policy was most successful in the case of new research programs, such as those of the Canada Centre for Remote Sensing of EMR and branches of Transport Canada, but that it was less successful in well-established research programs. The report went on to applaud the policy's intention and urged that it be more widely applied.

The potential for Technological Spin-offs: Of the dollar value of contracts awarded for science and technology from 1973-74 to 1980-81, 83 per cent went to industry and 17 per cent went to universities, non-profit institutions, individuals and other governments. Of the value of contracts awarded to industry, almost 56 per cent went to the secondary sector, slightly more than 44 per cent went to the service sector, and less than one per cent to the primary sector. There were four times as many service sector contracts as secondary industry contracts, but the average value of the secondary industry contracts was five times higher. Until 1980-81, R&D expenditures in the service



sector grew more rapidly than in the primary or secondary sectors. Small and medium-sized companies benefited most from the introduction of the contracting out policy. There have been several noteworthy examples of firms becoming internationally competitive through the effective management of government R&D procurement.

Because a significant portion of the contracts have been with firms in the service sector and most have been with small and medium-sized companies, questions have been raised regarding the extent of technological spin-offs. Opinion is divided. While cases exist where discoveries are transferred to manufacturing firms for commercial exploitation, there are also cases where this transfer does not take place. At issue is whether more commercial exploitation of R&D would occur if more contracts were let with larger, manufacturing-based firms. A conclusive answer is not available.

**Departmental Compliance with Contracting Out Policy:** Several factors have affected departmental compliance with the policy. When it was first introduced in the early 1970s, it was new, the Science Directorate within DSS was new, and the Unsolicited Proposals Program was new. Active marketing of the policy and the Unsolicited Proposals Program by the head of the directorate no doubt played a major role in the policy's early success (as measured by the increase in contracting out of science and technology activity).

While information is not available on the extent of contracting out on a departmental basis, information is available on intramural and extramural expenditures. Of the five departments accounting for the largest portion of expenditures on scientific activity, intramural expenditures accounted for 67 per cent of expenditures in the case of the NRC, 92 per cent in Environment Canada, 62 per cent of expenditures in EMR, 94 per cent in the case of Agriculture Canada, and 94 per cent in Fisheries and Oceans. The figures for NRC and EMR are lower because each department oversees a sizable grants and contributions program. What is more important, however, is that these percentages have remained virtually unchanged over the last six years.

By all accounts, DSS has apparently done a good job in the contracting out of science and technology activities, a function quite unlike purchasing goods. The 1981 Auditor General's Report noted that the contracting out procedures used in the DSS Science Centre were satisfactory.



Effect of the Policy on Government Personnel Engaged in R&D: At first glance, it would appear that the policy has resulted in no change in the allocation of human resources to government science-based programs, while at the same time there has been a steady growth in the number of personnel engaged in industry R&D. However, there has been a growth in personnel in the natural sciences field and a reduction in personnel in the social sciences field. Employment in the social sciences area falls mostly in scientific and related activity, a large part of which is data collection and processing. Therefore, the drop in employment in the social sciences area is largely due to the application of electronic data processing to clerical tasks. At the same time, the increase in personnel in scientific activity in the natural sciences would appear to have violated the spirit of the policy on the contracting out of science and technology.

Options for Improving the Government's Contracting Out Policy for Science and Technology: In examining options for improving the government's policy, first consideration should perhaps be given to changing the policy's objective statement. It might be restated to reflect the government's desire not only to stimulate industrial development, but also to streamline its own activities. The Wright Report argues that R&D should only be done in-house when there is a need for secrecy or neutrality, or when contracting out is not cost-effective and that the government should attempt to shift the bulk of its research to outside contractors over time.

Consideration might also be given to ways to better control implementation of the policy. Currently, it would appear that, unless some official or Minister champions the policy, its implementation will continue to be haphazard at best. As a first step, Treasury Board might be instructed to put emphasis on contracting out in its deliberations of new program expenditures.

Regarding existing expenditures, the goal should be to let managers manage. Therefore, it would not be appropriate for Treasury Board to interfere in the internal management of departmental mandates. At the same time, however, there may be merit in setting departmental targets for increased contracting out.

Consideration might also be given to changing the reward system as it applies to managers in line departments,

a suggestion also made in the Wright Report. Under the current employee classification system, management levels and corresponding pay scales are often dictated by the number of employees supervised, or in the case of scientists, the number of research reports prepared. Unless it is in the manager's and scientist's self-interest to encourage the contracting out of assignments, it is hard to imagine a policy of contracting out being successful. Therefore, the whole system of pay and classification should be examined to ensure it is not working at cross purposes with the goal of contracting out.

Finally, the possibility of contracting out administration of entire research facilities might be examined. Government-owned labs, operated by private contractors, are a well-regarded feature of the U.S. research establishment. Whether this arrangement is superior is subject to debate, but it appears to be a trend in the United States and some Scandinavian countries. Some tentative steps have been taken in this direction in Canada with the privatization of two Canadian Forestry Service labs and the special arrangement for the funding of the TRIUMF facility in Vancouver.

Conclusions: The federal policy for the contracting out of science and technology activity resulted, at least initially, in additional work being contracted with the private sector.

Compliance by departments with the policy has been haphazard. There are areas in almost all departments where compliance has been excellent, but there are many others where it has been very poor. While an extensive investigation was not possible within the available time frame, there is good reason to believe, based on past evaluations including the Wright Report, that levels of departmental contracting out could be significantly increased.

For a contracting out policy to be successful, there has to be the will to make it work, either on the part of department heads, or by someone who champions its cause. Targets must be set and a process developed, along the lines set out in the proposal for a general contracting out policy.

Should the government adopt a general, government-wide contracting out policy, consideration should be given to

fitting the science and technology contracting out policy into this more general framework. The recommendations that are included in this paper, would support this more general policy thrust. Hence, we should get on with more contracting out of science and technology activity.

## **OPTIONS**

In view of the foregoing, the study team recommends to the Task Force that the government consider the following measures:

1. amend the policy to delete the requirement that "the level of in-house scientific activity will not, as a result of the contracting out policy be reduced below that established at the time of the decentralization decision";
2. develop an action plan containing proposals to at least double the present amount of science and technology activity to be contracted out by FY 1988-89, this plan to consider contracting out the management and operation of various federal scientific establishments to industry and universities on a pilot project basis.

## APPENDIX A

### FEDERAL GOVERNMENT EXPENDITURES ON SCIENCE AND TECHNOLOGY BY MAJOR DEPARTMENTS

#### Federal Expenditures on S&T by Major Departments

Department/agency	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
	(millions of dollars)					
Agriculture (DOA)	160.5	172.7	197.9	221.5	267.3	295.0
Atomic Energy of Canada (AECL)	93.2	100.9	103.4	129.6	139.4	148.1
Canadian International Development Agency (CIDA)	37.6	36.7	41.9	48.6	54.4	61.8
Communications (DOC)	59.6	67.6	89.9	103.3	113.0	109.5
Energy, Mines and Resources (EMR)	152.7	194.2	232.2	256.6	321.7	388.3
Environment (DOE)	241.6	274.3	309.3	345.3	385.7	412.7
Fisheries and Oceans (F&O)	133.8	143.4	156.7	192.6	216.7	267.2
International Development Research Centre (IDRC)	36.5	39.8	45.9	53.6	61.3	76.5
National Defence (DND)	88.1	103.5	118.9	145.4	153.6	204.1
National Library (NL)	18.5	21.3	28.8	34.0	38.7	38.6
National Health and Welfare (NH&W)	66.1	72.5	86.5	94.1	107.5	115.1
National Museums (NM)	56.7	61.0	67.1	73.0	82.0	83.8
National Research Council (NRC)	205.2	230.0	285.5	352.4	438.8	524.5
Regional Industrial Expansion (RIIE)	87.6	100.8	138.0	129.9	178.6	174.1
Statistics Canada (SC)	134.6	157.7	246.9	208.2	234.2	249.5
<b>University granting councils</b>						
Natural Sciences and Engineering Research Council (NSERC)	121.4	163.2	202.1	245.3	282.0	292.2
Medical Research Council (MRC)	70.2	82.2	100.4	113.5	141.0	157.3
Social Sciences and Humanities Research Council (SSHRC)	36.8	42.8	46.9	56.8	60.4	57.3
Other	191.2	192.7	234.4	265.2	315.4	349.4
<b>Total</b>	<b>1991.9</b>	<b>2257.2</b>	<b>2732.6</b>	<b>3069.0</b>	<b>3591.7</b>	<b>4005.1</b>

**Source:** Federal Scientific Activities, 84/85,  
Statistics Canada, Catalogue 88-204E



# APPENDIX A

## FEDERAL GOVERNMENT EXPENDITURES ON SCIENCE AND TECHNOLOGY BY PERFORMER

	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
	(millions of dollars)					
<b>Total R&amp;D expenditures</b>	<b>1,217</b>	<b>1,387</b>	<b>1,679</b>	<b>1,939</b>	<b>2,282</b>	<b>2,566</b>
<b>Natural sciences R&amp;D (total)</b>	<b>1,124</b>	<b>1,291</b>	<b>1,568</b>	<b>1,815</b>	<b>2,148</b>	<b>2,425</b>
Intramural	646	737	865	1,042	1,167	1,344
Extramural (total)	478	554	703	773	981	1,081
Industry	203	215	282	313	437	519
University	201	255	313	369	430	454
Private non-profit	9	9	6	6	18	10
Provincial and municipal governments	30	32	33	3	5	7
Foreign	32	39	56	69	73	72
Other	4	4	14	13	17	20
<b>Social sciences (total)</b>	<b>93</b>	<b>97</b>	<b>110</b>	<b>124</b>	<b>134</b>	<b>141</b>
Intramural	39	43	47	52	56	59
Extramural (total)	54	55	63	72	78	82
Industry	5	3	5	7	8	6
University	27	30	34	42	45	44
Private non-profit	8	6	5	5	5	7
Provincial and municipal governments	2	2	4	1	1	2
Foreign	10	10	11	14	14	17
Other	2	3	4	4	5	6
<b>Total RSA expenditures</b>	<b>775</b>	<b>870</b>	<b>1,054</b>	<b>1,130</b>	<b>1,310</b>	<b>1,439</b>
<b>Natural sciences RSA (total)</b>	<b>437</b>	<b>490</b>	<b>551</b>	<b>625</b>	<b>732</b>	<b>809</b>
Intramural	344	371	432	491	547	611
Extramural (total)	92	119	119	134	185	198
Industry	57	79	74	72	88	98
University	15	20	26	31	41	43
Private non-profit	3	3	3	4	3	4
Provincial and municipal governments	7	7	6	17	37	40
Foreign	3	3	4	5	6	7
Other	7	6	6	5	11	6
<b>Social sciences (total)</b>	<b>338</b>	<b>380</b>	<b>503</b>	<b>504</b>	<b>578</b>	<b>630</b>
Intramural	296	335	456	448	514	544
Extramural (total)	42	45	47	57	64	85
Industry	10	10	9	11	12	12
University	14	15	16	19	23	47
Private non-profit	6	5	6	8	9	8
Provincial and municipal governments	5	5	6	7	8	7
Foreign	5	5	6	7	8	8
Other	2	4	5	4	5	4

**Source:** Federal Scientific Activities, 84/85,  
Statistics Canada, Catalogue 88-204E

\* Related Scientific Activity

SUMMARY OF  
FEDERAL GOVERNMENT EXPENDITURES ON  
SPECIFIC ACTIVITIES

By Performer, 82/84

(thousands of dollars)

Performer	82/83		83/84		84/85	
	\$	%	\$	%	\$	%
Intramural	2,033,231	(66.3)	2,284,170	(63.6)	2,558,344	(63.9)
Industry	402,724	(13.1)	545,083	(15.2)	634,037	(15.8)
Universities	461,432	(15.0)	538,423	(15.0)	587,497	(14.7)
Non-Profit Institutions	23,314	(0.8)	35,076	(1.0)	25,853	(0.7)
Provincial and Municipal	27,753	(0.9)	50,495	(1.4)	55,615	(1.4)
Foreign	94,160	(3.1)	100,126	(2.8)	102,870	(2.6)
Other Canadian	26,339	(0.9)	38,287	(1.1)	36,845	(0.9)
<b>Total</b>	<b>3,068,953</b>	<b>(100.0)</b>	<b>3,591,660</b>	<b>(100.0)</b>	<b>4,005,071</b>	<b>(100.0)</b>

**Source:** Federal Scientific Activities 84/85  
Statistics Canada Catalogue 98-204F

# APPENDIX A

## FEDERAL GOVERNMENT PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES BY MAJOR DEPARTMENTS

### Federal Personnel Engaged in S&T Activities

Department/agency	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Agriculture (DOA)	4,057	4,018	4,124	4,166	4,138	3,987
Atomic Energy of Canada (AECL)	2,322	2,394	2,486	2,607	2,652	2,686
Canadian International Development Agency (CIDA)	56	57	57	57	57	57
Communications (DOC)	649	670	683	743	700	681
Energy, Mines and Resources (EMR)	2,403	2,484	2,401	2,549	2,553	2,581
Environment (DOE)	4,921	4,915	4,894	4,866	4,881	4,898
Fisheries and Oceans (F&O)	2,122	2,143	2,516	2,618	2,636	2,752
International Development Research Centre (IDRC)	217	218	225	245	279	300
National Defence (DND)	1,895	1,870	1,932	1,913	1,923	1,957
National Library (NL)	500	500	517	542	540	526
National Health and Welfare (NH&W)	1,186	1,334	1,260	1,360	1,440	1,430
National Museums (NM)	-1,013	1,006	981	1,001	1,006	1,001
National Research Council (NRC)	3,160	3,158	3,197	3,366	3,450	3,515
Regional Industrial Expansion (DRIE)	298	191	193	190	198	201
Statistics Canada (SC)	4,534	4,619	5,489	4,740	4,651	4,605
University granting councils (total)	206	219	205	248	266	278
Natural Sciences and Engineering Research Council (NSERC)	61	75	81	98	111	120
Medical Research Council (MRC)	40	39	39	45	51	54
Social Sciences and Humanities Research Council (SSHRC)	105	105	85	105	104	104
Other	3,575	3,246	3,654	3,437	3,457	3,432
<b>Total</b>	<b>33,114</b>	<b>33,042</b>	<b>34,814</b>	<b>34,648</b>	<b>34,827</b>	<b>34,887</b>

**Source:** Federal Scientific Activities, 84/85  
Statistics Canada, Catalogue 88-204E

## APPENDIX A

### FEDERAL GOVERNMENT EMPLOYEES ENGAGED IN SCIENTIFIC ACTIVITIES 1976/77 TO 1984/85

YEAR	NATURAL SCIENCES	SOCIAL SCIENCES	TOTAL
<b>All scientific activities</b>			
76-77	23,640	12,000	35,640
77-78	23,660	11,010	34,670
78-79	23,560	10,530	34,090
79-80	23,440	9,680	33,120
80-81	23,440	9,600	33,040
81-82	24,120	10,700	34,820
82-83	24,770	9,870	34,650
83-84	24,950	9,870	34,830
84-85	25,060	9,830	34,890
<b>R&amp;D - R-D:</b>			
76-77 (2)	15,500	1,410	16,910
77-78	15,380	1,100	16,480
78-79	15,560	1,010	16,570
79-80	15,310	920	16,230
80-81	15,280	820	16,100
81-82	15,750	840	16,590
82-83	16,410	760	17,170
83-84	16,470	700	17,170
84-85	16,510	690	17,200

(1) Rounded to the nearest 10.

(2) Census year.

**Source:** Federal Personnel Engaged in Scientific Activities  
1976-77 to 1984-85, Statistics Canada,  
Catalogue ISS 0821-1663



## **ELECTRONIC DATA PROCESSING: "MAKE OR BUY" POLICY**

### **PURPOSE**

To assess and recommend changes to the existing Treasury Board (TB) Policy on buying out for electronic data processing (EDP) services.

### **BACKGROUND**

The Treasury Board Policy of December 1978 requires departments and agencies to purchase EDP needs from the private sector unless it is in the public interest or more economical to provide the services internally. Departments must also ensure that the provision of EDP support to relocated or decentralized government operations is through local service bureaux, or facilities management contracts, in preference to the installation of new government computers.

In the late 1960s, EDP operations on Revenue Dependency were done within TB by the Government Central Service Bureau. Because large and expensive computers were used, it made sense to centralize. In 1969, the Bureau was moved to the Department of Supply and Services (DSS) and in 1973, TB published a guide on EDP. That guide provided the base for most of today's EDP policies.

The use of consultants and service bureaux continues to be the major item of expenditure in external services. However, dollar growth in the use of service bureaux is declining due to the inroads of on-line small computers, while growth in the use of consultants has been increasing<sup>1</sup>.(Appendix A)

In August 1983, the Task Force on Informatics (TFI) was created to study the resulting technology of a) office technology, b) electronic data processing, c) telecommunications, and d) related electronic technologies. A background paper on Informatics and Procurement recommended "that contracting out activities focus on turnkey development and services and facilities management".

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<sup>1</sup> TBS, Review of Information Technology and Systems, Dec. 1984. Note: This document is in the process of being published.

## ASSESSMENT

The investigation and analysis, involving a search of literature and interviews with EDP managers in both the public and the private sectors, identified three key reasons for contracting out. They are:

- savings that can be realized;
- the improvement possible in government programs through more effective use of industry resources as well as an appropriate transfer of risk to private sector expertise; and
- the development of business opportunities in the private sector.

Why is the private sector cheaper and how much can be saved in EDP by contracting out? For this paper, a meaningful calculation of savings was not possible (time and resource limitations), but the hypothesis is supported with a number of case histories (Appendix B). Industry was said to be more efficient because it is not as restricted by policy and practice as is government, and cost measurement is more precise allowing focused cost reductions. Another company was more productive because of better union relations, making the employees shareholders with a profit-sharing plan and obtaining incentive fees in contracts. It was also able to reduce costs by going to competitive tender for fringe benefits and for its pension plan. One of the most important reasons is that the private sector has a better chance to transfer the latest technology to its projects. The private sector also has a broader technology base from which it can draw.

While it has not been possible in this study to produce empirical data to show that contracting out is cheaper, the case studies shown in Appendix B do provide evidence to that effect. The social services example (Appendix B) is one such case. Experience has built upon experience and now the U.S. market has been penetrated. The case illustrates the job creation and multiplier effects that were experienced. The industry sees market niches that government can open up for them by awarding the projects that are now done in-house. Industry is convinced it can perform such projects at lower cost than can government.

Is there room for savings in the federal government? Industry believes there are many EDP projects normally done

in-house that could be done at lower cost with phased turnkey contracts. Such contracts would be carried out in distinct phases, each phase being completed before the next phase is authorized. This would allow a company to mobilize its expertise from the time the requirement is defined, through to analysis, design and implementation. It would also make industry's resources available in the most effective manner.

To start the process, a department would prepare a statement of work (SOW) and request for quotations (RFQ) for an analysis. After performance of the contract, a second RFQ would be issued for one or more implementation phases. Ideally, this second RFQ would include the complete integration of the system, i.e., a turnkey responsibility. This is in contrast to the in-house practice where a project is done using 20 or 30 government employees augmented with 20 or so consultants. The in-house participants will seldom have the breadth of expertise required for the job, and some disciplines could be missing from the process: e.g., the SOW is probably not as clear or as complete as it would be if it was part of an RFQ; there may not be a schedule (this situation was found in several instances); the budget may be indeterminate and did not likely receive the same scrutiny that a contractor would give it; and finally, the project will probably not be subject to the design and progress reviews that normally would be held with a contractor.

During the study, questions were asked about business opportunities for industry. Most departments interviewed thought the maximum buying out was already taking place. By contrast the private sector suggested there are many additional opportunities (see Appendix C).

Some of the candidate projects are already in progress within the departments on a piecemeal basis, the type of process industry criticizes. Instead, the government should use the private sector on the phased, turnkey basis to a) replace old, creaking systems, and b) to develop new systems as they are needed. To do this it is important that they have the right infrastructure within the department to handle the procurements.

To summarize the assessments to this point, evidence has been shown to support the following:

- the private sector can save money and be effective, bringing with it beneficial transfers of technology;



- the private sector places emphasis on the methodology to be used: contracting out should be on a phased, turnkey basis to allow effective mobilization of resources and expertise; and
- there are activities in government that represent opportunities for the private sector with job creation and product development as potential benefits, but which require departmental capability to manage.

What are some of the arguments against the government contracting out for more of its EDP requirements? During the public sector interviews, contracting out and privatizing were resisted. Security problems, the lack of incentives, the need to understand government and so on were common themes. While it was not stated explicitly, there is resistance to change, and an attitude prevails that "make" is easier and allows greater control.

Some departments are concerned that by contracting out, they would lose their technical capability. An analogy to this is that by buying a car, you would not know how to make one, or by buying Supercalc for your personal computer, you would not know how to write a program. Using the turnkey approach, the emphasis is placed on the requirement and on the management of the contractor. What would be needed in the department are a small number of high-powered, experienced managers who know their business, know what the project is supposed to accomplish, and can manage the contractor. They do not need to be programmers but do need some systems experience. There is evidence of a growing trend in business and within some governments, to acquire EDP on a turnkey basis. Implicit in this trend is the requirement to concentrate on larger projects and on the capability to control the projects.

Some departments rejected contracting out for certain applications. There is a wealth of expertise and software for business and administrative applications, but little is available for scientific work. Atmospheric Environment Services and Statistics Canada are examples where in-house expertise is not readily duplicated in the private sector. Scientific applications form 20 per cent of the government's EDP.



Other reasons given as restraints to contracting out are:

- Security: Could jeopardize operations in areas involving national security (e.g. DND), and with personal security (e.g., Revenue Canada, Taxation and Statistics Canada). However, opinion was not unanimous.
- Incentives: There is a perception that reduced staff caused by buying out would reduce an employee's classification level.
- Splintering of Technology: Buying out caused a dispersal of technology within an EDP operation.
- Reward System: Problem solving may produce user savings but incurs expense without a share of the savings for the EDP manager. Being effective thus produces a negative reward.
- Understand Government: Only a person working in government can understand the operation.

Several EDP managers found the TB policy for "make or buy" onerous, inflexible, constraining and a major work load. Many said there was no need for change but some disagreed, saying that technology advances had caused the policy to be outdated.

As an exercise in understanding the arguments against contracting out, the interviews were disappointing. While some of the reasons may have merit, none of them are of such substance as to earn acceptance categorically. Intuitively, the arguments seemed "convenient" and are what might be expected when change could be the next step.

## OPTIONS

The study team recommends to the Task Force that the government consider developing and implementing revisions to the "make or buy" policy for EDP services, (TB-APM Chapter 440) which:

1. focus on contracting out entire projects related to new and replacement EDP services;
2. direct departments to identify in their annual EDP plans, opportunities for contracting out, and develop as part of such plans, long-term strategic objectives for EDP activities which would enable departments to better organize for contracting out.

## APPENDIX A

### EDP ACTIVITIES IN THE FEDERAL GOVERNMENT<sup>1</sup>

#### FULL EDP COSTS (\$ million)

		ACTUALS			PLANNED	
	80/81	81/82	82/83	83/84	84/85	85/86
Full						
Costs	415,640	521,004	643,589	756,108	883,273	923,972 <sup>2</sup>
% Growth	-	25.3	23.5	17.5	16.8	4.6

#### CONSULTANT AND SERVICE BUREAUX SERVICES (\$ million)

	82/83	83/84	84/85	85/86
Consultants	43,908	56,036	80,020	62,220
% Growth	-	27.6	42.8	(22.2)
Service Bureaux	58,440	62,076	69,317	71,098
% Growth	-	6.2	11.7	2.6
Total External	102,345	118,112	149,337	133,318
% Growth	-	15.4	26.4	(10.7)
% of Full Costs	15.9	15.6	16.9	14.4

Figure A-1 shows trends in the use of the private sector. The dip in the consultants' projection for 1985-86 is not expected to happen.

#### INTERNAL SERVICES

The 1984 issue of TB Secretariat's (TBS) review of Information Technology and Systems lists 46 departments/agencies with EDP expenditures. Of these, 12 were interviewed, 8 being in the top 10.

- a. For the 46 organizations listed, projected 1985-86 EDP expenditures varied from \$88.097 million (1,590 person-years) for Supply and Services to \$151,000 (two person-years) for the Medical Research Council. Twenty-three have expenditures over \$15 million<sup>1</sup>.

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<sup>1</sup> TBS, Review of Information Technology and Systems, December 1984.

<sup>2</sup> This figure is as estimated by activities. Based on experience, TBS estimates the number will be \$1,025,000, i.e., a growth of 16 per cent.

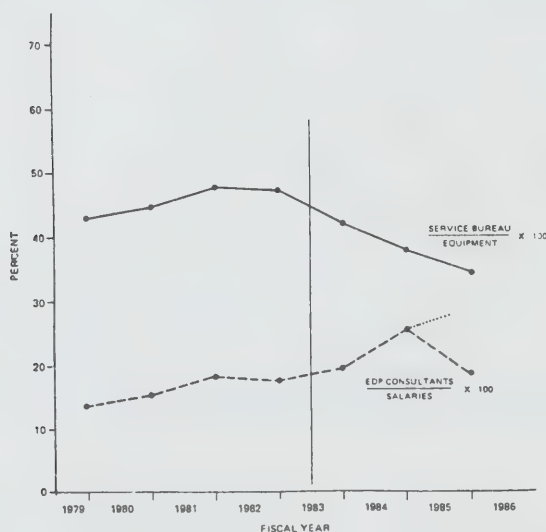
- b. A tabulation of the EDP costs broken down by element is as follows:

	84/85		81/82
	(\$ million)	%	%
Salaries	361	41	44
Equipment (*)	182	21	19
EDP Consultants	80	9	7
Service Bureaux	69	8	9
Data Transmission	37	4	4
Software	20	2	1
Supplies	18	2	3
Sub-total	767	87	87
Accommodation	29	3	3
Other Support Costs	87	10	10
<b>Full EDP Costs</b>	<b>883</b>	<b>100</b>	<b>100</b>

(\*): includes actual and imputed rentals, and maintenance

**Breakdown of EDP Costs**  
**Table 9-1**

# **INDICATORS OF USE OF PRIVATE SECTOR**



**Figure A-1**

## APPENDIX B

### CASE HISTORIES OF CONTRACTING OUT FOR EDP PROJECTS

**Student Loan Program:** The term is four years at about \$2 million a year. The contract was won in a competitive bid. The initiative was attributed to good management under the Secretary of State. A feature of the contract was an escrow agreement tied to performance.

**HTS Hi Tech Systems Limited:** In 1977, the B.C. government founded BCSC, British Columbia Systems Corp., a Crown corporation with 600 employees and a mandate to do all the EDP for the government ministries. This includes income tax, sales tax, etc., - everything except Crown corporations.

In 1984, BCSC privatized the facilities management portion of its operation by selling it to a 130-member employee group. BCSC's motivation for the privatizing was said to be partly political and partly based on the belief that money could be saved. It was reported that the new company was able to increase productivity because of a better working relationship with its employees' union and the fact that all employees (except for five) were shareholders. They have a profit-sharing plan and the contract with BCSC has an award fee based on a performance grid. Proof of increased productivity is that revenues have increased while staff has actually decreased by five.

Nine months of a two-year contract have passed. HTS has diversified and now 25 per cent of its business is outside BCSC. They are looking at systems development and have acquired a data entry company in Victoria.

**National Museums of Canada (NMC):** In the early 1970s, Cabinet directed that a record should be made of Canada's heritage. This was interpreted to mean recording some 20 million artifacts in 150 federal, provincial and municipal museums. Initially, Museums Canada undertook to develop a computerized inventory system on its own. In the late 1970s, it became apparent that it did not have a sufficient budget to do an adequate job.

In 1980-81, Museums Canada negotiated a joint venture with Control Data Corporation to solve some of the problems it was having developing the system. Museums Canada pays for machine rental - \$550,000 a year - while Control Data



develops the software and maintains the equipment at no charge. In exchange, Control Data has exclusive marketing rights to the system that is being developed. To develop and maintain its own system in-house, Museums Canada estimated that it would have required 100 person-years (average salary \$38,000 per employee). The joint venture route has required only 34 person-years.

NMC also has a facilities management contract with the private sector.

**PARIS Project - Production Accounting Resource Information System:** A major oil company in Canada began a three-year project in February 1985 for automation of their "upstream" production accounting business. It contracted for \$7 million on a turnkey basis with a Canadian systems consulting and development company for overall management of the project which will supply most of the project resources. Up to 20 to 30 professionals will be involved, with only two people from the oil company.

The oil company's original intention was to do the project internally, but because of economies and cutbacks, resources were inadequate in project management. This led it to look to the industry. The company controls the activity with a management committee of four senior managers - two from systems, one from finance and one from operations.

**EDP in the Province of Saskatchewan:** Saskatchewan has adopted a general policy of going to industry for turnkey projects. Projects are under way in Social Services, Revenue and Finance, Justice and Personnel. While the first two are not truly turnkey, the contractor is managing the projects.

The **Social Services** project had its origins in a federal government initiative of encouraging provinces to set up systems for welfare. One contracting firm did development work on its own which equipped it to win contracts with five provinces (in competition). It developed an expertise which allowed it to win another contract in Alaska, which in turn led to work with other U.S. states - it now has a backlog with six states. Contracts range in size from \$2 million to \$10 million. Future prospects are bright. If, instead, governments had done these programs themselves, the contractor could not have developed the technology and gone after the export business. It has been an excellent example of job creation and illustrates the multiplier effect.

**SUGGESTIONS FOR "MAKE OR BUY" FROM THE PRIVATE SECTOR**

**Personnel Systems:** There is a requirement for centralized personnel information within the public service involving:

- DSS: payroll,  
personnel;
- TBS: language training,  
classification;
- PSC: staffing,  
language training;
- Other departments: departmental information systems.

Much of the information is common such as historical information and general descriptive information (name, classification, level, etc.). While there is a requirement to work together in the development of these systems, there has not yet been the leadership necessary to achieve integration. A possible approach would be to form a project office with one department, i.e., a common service responsible for the integration of the required systems. Having done this, it would be possible to look to the private sector for assistance in designing and developing a viable "systems" solution.

**Museums:** Museums Canada is investigating alternatives for the redevelopment of its financial and personnel systems using departmental public servants. There are firms which are experienced in these areas and an alternative would be to use one of them to define the department's requirements.

**Correctional Service:** Many EDP systems in this agency are being planned and developed in an ad hoc manner. An alternative would be to identify total systems of a high priority and contact the private sector on a turnkey basis.

**Indian and Northern Affairs (RFP):** The department has issued two Requests for Proposal in the data processing area. One is for a network of mini-computers and the second is for the system and operating software for these computers. An alternative would have been to seek integrated solutions combining both hardware and software.

**Customs and Excise:** The government has signed an international agreement which will result in the standardization of coding of descriptions of products which are traded between Canada and other countries. When this agreement is implemented, it will require an extensive redesign and redevelopment of many of the information systems within the department. The project is being managed by the department with the use of private sector consultants from a large number of consulting firms. An alternative would be to contract for the entire development with one private sector firm on a turnkey basis, thus shifting the risk to a private sector firm and allowing for technology transfer and potential exports.

**Health and Welfare:** The department has recently contracted with a number of firms to undertake a series of studies aimed at integrating much of the processing of cheques for the Canada Pension Plan, Family Allowance and Old Age Security programs. The activity is being managed by the department and could be totally contracted out on a turnkey basis.

**Transport Canada:** Most of the systems development work in this department is done internally with extensive support coming from private sector consultants who are retained on a per diem basis. An alternative would be to identify large systems development projects and contract them on a turnkey basis.

**Supply and Services Canada:** The Procurement Automation Support System (PASS) is being defined and developed using resources from a number of different firms. An alternative, which could remove much of the risk from the government, would be to contract the entire system on a turnkey basis, and allow for technology transfer.

The department is converting from Sperry and Honeywell computers to IBM. This is a massive project which is being undertaken in-house and public servants are being supplemented by per diem analysts and programmers. An alternative would be to define the entire conversion required and seek a turnkey solution.

**Department of National Defence:** The department is in the process of developing a new financial information system (FIS Mark III). A software package has been purchased and the department has issued an RFP to acquire the necessary

hardware. A similar approach is being followed in other DND systems, specifically the supply system and the CF Career Planning System. An alternative would be to contract out on a phased turnkey basis.





## **SECTION 4 - FAIRNESS AND ACCESSIBILITY TO SUPPLIERS**

### **OVERVIEW**

#### **INTRODUCTION**

In any business, a natural tension exists between buyers seeking the lowest price, and sellers seeking the opposite. The business of government procurement is no exception.

However, government's special concern over prudence and probity, accessibility and fair treatment to all its suppliers has resulted in a body of policies and practices not usually found in the private sector. The broad issue addressed by the team is whether the additional tension associated with government procurement practice is reasonable or whether it has grown to unreasonable proportions.

Members of the team reviewed available statistical information and visited private sector panels of experts and public servants in the regions from St. John's to Vancouver to assess the issue of fairness and accessibility to suppliers. Based on this investigation, we conclude that with the exception of the low levels of competitive contracting, the current system exhibits reasonable degrees of fairness to suppliers in granting access to the government market.

At the same time, we have found a small number of persistent concerns across Canada that warrant remedial action.

#### **Findings Associated with Fairness to Suppliers**

In this area, the team has focused primarily on whether the provinces and small business are receiving their fair share of federal government purchasing. Our main findings are that:

- available economic and statistical data on the issue of "fairness to provinces" are sketchy, and do not provide sufficient information for ministers to draw conclusions and adapt policies. Available data indicate that much of Atlantic and Western Canada are disadvantaged in their share of federal business, but information supporting this view is poor;

- strong support exists for recent DSS initiatives to expand regional procurement and these initiatives can be continued since other operating departments have considerable scope to increase requisitioning levels in their regional and local offices; and
- small businesses in five of the six major industry sectors (excepting manufacturing), have consistently received a significant share of DSS business. However, departments, other than DSS, do not accurately track overall government success in promoting procurement from small business. Greater departmental attention to this matter could lead to improvement.

### **Findings Associated with Accessibility**

While the findings of the team are severely limited by a lack of available data, suppliers in the regions identified four specific and widespread concerns associated with accessibility:

- a multiplicity of departmentally managed source lists that confuse suppliers and impose an unnecessary paper burden;
- a DSS rotational bidding system on low dollar value purchases that is perceived to be unnecessarily arbitrary;
- a lack of easily accessible information on upcoming government procurement requirements; and
- a government reliance on specifications and standards that are product and brand specific (rather than performance based) and hence, may be unduly restrictive.

### **Remedial Action**

In the judgement of the team, the required remedial actions will not involve any dramatic government action. However, important steps need to be taken.

To ensure fairness both to regions and small business, government needs a much improved information base to make informed public policy decisions. Increased delegation of requisitioning authority to regional offices should be pursued by departments, and consideration should be given to establishing a small business advisory panel to advise the Minister of Supply and Services on procurement issues.

To enhance supplier access to the government market, DSS and departments must make their needs known to business and improve opportunities for business to bid. Improvements should focus on:

- establishing a single location within DSS for suppliers to register their interest in selling goods and services to all government departments;
- a reform of the DSS policy and practice on rotational bidding;
- better notification of government requirements beyond the present solicitation process, perhaps by electronic billboarding of requirements; and
- greater industry participation in the development of performance-based specifications and standards.



## **ACCESSIBILITY**

### **PURPOSE**

To determine whether or not suppliers to government are faced with a procurement system that is fair and accessible.

### **BACKGROUND**

The diversity of government procurement is reflected in a variety of policies and practices designed to match common commercial practice. Nevertheless, the peculiar nature of government procurement, and the sometimes unique requirements of government, have caused this market to be different from others. Government's concern over prudence and probity, accessibility, and fair treatment of all its suppliers has caused it to develop a body of policies and practices which is not usually found in the private sector.

Although both private and public sectors are concerned with obtaining value for money, the two sectors measure this value in different ways. The private sector, while always interested in quality and the best price, might pay more attention to security of supply; whereas, in the public sector, there is the further need to be open and fair to all. This characteristic of government procurement has resulted in a more complex system that may result in unintended inefficiencies.

The study team dealing with this issue examined recent reports and studies commissioned by the Department of Supply and Services (DSS). The team was then briefed by DSS and Transport Canada on their respective procurement systems. Having then formed a view on the potential barriers that exist, the team conducted a series of interviews with government suppliers across the country. Thirty-six suppliers from Vancouver, Edmonton, Regina, Halifax, and St. John's shared their experiences with the team.

### **ASSESSMENT**

It is fundamental in any procurement system to have a method for the buyer to be aware of what goods and services are available and from whom, and for the sellers to make

known to the buyers what they have to offer. This need is satisfied in government in a variety of ways, ranging from a complex computerized system operated by DSS to simple lists kept by buyers in departments who may occasionally be involved with procurement.

A recent consultant's report on the feasibility of a government-wide sourcing system identified 12 separate systems and estimated that the costs for supporting these systems ranged from \$42 million to \$85 million a year. With the exception of the Business Opportunities Sourcing System (BOSS) maintained by the Department of Regional Industrial Expansion (DRIE) for international marketing purposes, all other systems are procurement-based.

DSS has developed and maintains the National Automated Sourcing Information System (NASIS). It contains 13,600 lists of commodities and services against which about 132,000 suppliers are registered. In 1984-85, 54,834 suppliers were successful in obtaining contracts, and within the last three years, about 90,000 suppliers had at least one contract from DSS.

Notwithstanding, suppliers have expressed dissatisfaction with accessibility, especially in the services area. This is not surprising, since departments do most of their own services procurement and individually deal with suppliers. Depending on the extent of their activities in this area, departments have had to develop their own systems. This is the source of most duplication.

Recognizing that some individual departments have their own unique requirements for source listing, it is possible that certain basic information about suppliers can be centrally collected, such as the company's name, address, principal officers, points of contact and products and services offered. This central collection of company data would help the supplier, who now has to register with each of these departments, and the user, who has to know that the information on file is current.

A single registry point would be economic, efficient, and a positive step in reducing the paper burden for suppliers and government. Although potential savings are difficult to determine at this time due to the lack of data, we could assume a 25 per cent savings by eliminating duplication, i.e., \$10 to \$20 million annually.

Being included on a government source list does not guarantee that the supplier is invited to bid. The buyer must also determine who on the source list should be invited to bid in order to develop a bidder's list. The complexity of this decision depends on the commodity or service involved. The buyer can either invite everyone on the source list to bid; group suppliers into categories; employ the policy of local area buying; rotate suppliers; or conduct an extensive process of prequalification. This decision is usually dictated by balancing fairness to suppliers with administrative costs and efficiency. These costs accrue, not only to government, but also to the supplier, especially when detailed proposals are required.

For reasons of administrative efficiency DSS rotates suppliers for requirements under \$10,000. For requirements between \$1,000 and \$2,449, two bidders are invited, the previous lowest bidder and one additional bidder; between \$2,500 and \$10,000 one more bidder is added to the bidder's list. NASIS keeps track of the rotation of suppliers. Suppliers, however, believe this system is arbitrary and blocks access to government business. They argue that, under such a system, a firm may miss an opportunity to bid again if it failed to win the last contract by the smallest of price margins. Their next opportunity may not come for some time. They would prefer to be invited on each occasion.

Governments can also provide access through advertised tendering. This is often used in construction and public works contracts. Although this method provides easy access, its accompanying costs are high. These include costs for bidders in preparing proposals and costs in the evaluation and selection of contractors. This approach may not be practical for all varieties of government procurement.

With the advent of greater computerization, it is now technically possible to inform all interested suppliers of upcoming requirements. Similar to the Business Commerce Daily, the newspaper used by the U.S. Government, solicitations for bids can be posted electronically on a computerized data base. Interested suppliers may then access this data base either with their own computer terminals or at some central location, and request a set of bid solicitations documents. This places the onus on the supplier to keep himself informed of the requirements and reduce any complaints he may have for not being invited. As



with the U.S. system, only suppliers previously registered would be permitted to submit bids.

Another area of annoyance to suppliers is the specifications and standards used by government. Suppliers believe that government is continually specifying features which are product-specific, instead of performance or function-related. The clothing industry is constantly critical of DND's uniform specifications. With the exception of printing, these complaints are common and persist despite a Treasury Board policy which states a preference for performance specifications to avoid sole source (no substitute) situations.

If one views a specification or any definition of requirement as a tool used by both buyers and sellers, one may assume that a natural tension exists. Managing this tension to keep it in reasonable proportions is crucial.

Products required by government fall into two categories - those commonly available in the marketplace and those which are custom made to meet a unique government need.

For the commercially available commodities, there are standard specifications published by one of the recognized standards organizations such as the Canadian Standards Association, Canadian General Standards Board and others. Should the commodity not be covered by these specifications, a general product description in functional form will usually suffice. Failing this, DSS as a common service agency, should undertake to develop with industry an accepted specification for commonly used items.

Products which are unique to government needs are more troublesome. The specifications are varied and written by people who have a range of technical experience. One option is to first identify those commodity areas where the requirements are recurring, and develop specifications with industry participation, so that current technology and market practices are truly reflected. Departments with such recurring requirements should undertake to develop these specifications to meet their own requirements. If departments do not have the proper resources to do this, they should acquire them through contract.

For non-recurring requirements, departments should seek input from potential suppliers. For example, a draft



preliminary specification could be circulated to the trade for input. Opening such dialogue could result in a plethora of comments, but would give the trade an opportunity for their comments to be considered. This is happening on a small scale. Although this approach would consume time in the procurement process, it would result in products more suited to industry's capabilities at potentially reduced costs.

The study team concluded that:

- There is a need to reduce the proliferation of source lists by establishing a common registry for government suppliers.
- The DSS practice of rotating suppliers for requirements under \$10,000 requires a thorough review.
- Government specifications and standards should be developed with input from industry.

## **OPTIONS**

The study team recommends to the Task Force that the government, with a view to maintaining and improving prudence and probity in government procurement and to encouraging more competition, consider establishing guidelines for defining government goods procurement requirements (specifications and standards) which would:

1. promote industry's participation in the development of government procurement specifications;
2. encourage competition through the use of performance-based specifications rather than product-based specifications, wherever possible; and

To provide for a more accessible and fair procurement system, the government should also consider:

1. establishing, within DSS a single point for suppliers to register their interest in selling goods and services to all of government;

2. determining the feasibility of an electronic bulletin board system to inform interested suppliers of government procurement requirements;
3. improving the policy of rotating suppliers by applying it only to suppliers of frequently ordered commodities on extensive source lists, and communicate this revised policy to affected suppliers.

## **SMALL BUSINESS**

### **PURPOSE**

To determine the accessibility that small business has to the government market and recommend action to help increase its share of that market.

### **BACKGROUND**

A stable and viable small business sector is among one of the government's top priorities. The role of small business in creating jobs, advancing technology, and increasing productivity with creativity and entrepreneurial spirit are well recognized. The range of goods and services required by governments in the delivery of programs is often met by the small business sector, be it scientific knowledge required to formulate regulations or the supply of common goods needed in offices. Government procurement must therefore play its role in support of this important sector of the economy.

Small businesses in Canada are those with up to \$2 million in annual sales and/or employing up to 50 people. The majority of the 750,000 small businesses employ fewer than 20 people and provide 26 per cent of Canadian employment. They also accounted for virtually 100 per cent of net job creation over the 1978-82 period. In 1980, about 96 per cent of firms operating in Canada reported sales below \$2 million. They contributed approximately 30 per cent of the private sector gross domestic product and the majority were in retail trade, business and personal services, or construction.

The average age of Canadian entrepreneurs is between 35 and 45 and decreasing. Young people and women are playing a larger role in small business ownership. The number of new small business proprietors increased 50 per cent between 1964 and 1980. During this time, the proportion of businesses owned by women almost tripled while those owned by persons under 30 more than doubled.

### **ASSESSMENT**

The Department of Supply and Services (DSS), as the government's prime procurement agent, has been collecting

data on its activities with small business. Each year, under Cabinet direction, a report is submitted. Much of the following assessment is based on this report but the data are not complete. They exclude government procurements in services and construction which are handled directly by departments. For construction, entities such as the Department of Public Works (DPW), Defence Construction Ltd., Parks Canada (PC), Transport Canada (TC) and others contract directly with suppliers. Moreover, data on sub-contracting are absent from the statistics. The absence of this information is significant as trade, services, and construction make up 68 per cent of small business. Moreover, there are no comprehensive data available on low dollar purchases, i.e., less than \$250, either from DSS or other departments. One can speculate, however, that the vast majority of these purchases are from small businesses. DSS alone issues \$6.8 million worth of goods under \$250 annually, and it is estimated that departments directly purchase some \$500 million themselves.

Within DSS's procurement program, 10 per cent of all Canadian registered businesses are listed as suppliers of goods and services, 50 per cent of which are small business. The percentage of DSS contracts with small business measured in value of purchases varied from a high of 40 per cent in 1977 to a low of 30 per cent in 1983. However, during this period the small business share of contract value rose from \$782 million to \$1.6 billion, a 7 per cent annual increase based on constant 1977 dollars. This anomaly in the statistics is caused by significant changes in the procurement pattern over the last six years. During that period, DSS's largest customer, the Department of National Defence (DND), has had major capital acquisitions which, being of unusually high value and complexity, are generally contracted to larger firms. With the continuing program of major procurements expected over the next decade small business participation could be jeopardized if not monitored.

An analysis of the distribution of DSS contracts by value between small firms and other business at an industry sector level, showed that small business consistently received a significantly greater share of business in five of the six industry sectors, including primary industries, construction, transportation, trade, and services. In the remaining sector, manufacturing, other business fared considerably better due to their dominant role in areas such as aerospace, shipbuilding, electronic communication



equipment, oil refining and chemical manufacturing. What the data do not show in the manufacturing area is the level of sub-contracting to small businesses (Appendix 1).

Upon further examination of the 1983-84 DSS contract statistics (Appendix 2), the base figure used for analyzing the share of small business is \$5,178 million. Of this amount, \$1,559 million or 30 per cent went to small business. A further breakdown indicates that \$1,410 million comprised contracts valued at less than \$2 million. When this amount is compared with the total amount of contracts less the \$2 million (\$1,801 million), the small business share represents 78 per cent.

Recognizing the importance that government has placed on promoting small business but dissatisfied with its own progress, DSS has embarked on a proactive program to further improve the small business share of federal procurements. This was identified as an initiative in the 1984-85 Annual Procurement Plan and Strategy (APPS) document and reaffirmed in this year's APPS. This program includes a detailed review of policies and practices and identifies potential barriers. As a result, the following programs have been initiated:

- an aggressive communication program including 70 supplier briefings in every region, 20 trade shows, 13 commodity-oriented Procurement Outlook conferences;
- simplified and quick vendor registration;
- small business participation in major contracts;
- simplified contract terms and conditions; and
- financial policies more sensitive to small business.

The initiatives taken by DSS to increase the share of government procurement to small business are commendable but there appears to be a lack of coherent policies. Has DSS reached a point of diminishing returns? What is Canada's position on a set-aside program? Are certain industries too fragmented to be efficient? What is the procurement role in supporting small business? These and other questions must be addressed in a coherent set of policies.

In May 1982, the Minister of State (Small Business and Tourism) announced the creation of the Small Business Advisory Panel to assist and advise him in his role as advocate for small business. The panel accomplished its mandate by providing a forum for obtaining widespread and

direct participation of small business on existing and proposed government policies and programs. Although this panel effectively ceased operation in 1984, the Minister of State for Small Business is considering the establishment of a similar body which could be asked to form sub-panels to examine specific issues such as government procurement. Such a sub-panel could advise DSS on what procurement issues need attention.

## **OPTIONS**

The study team recommends to the Task Force that, in order to provide for a more accessible and fair procurement system, the government consider developing a data base of contract information upon which to develop policy and establish realistic objectives relating to government procurement from small business.

Should the Small Business Advisory Panel be re-established, the government should consider creating a sub-panel to deal with procurement issues with the objective of advising the Minister of Supply and Services on those issues which need attention.

**DSS CONTRACTS BY VALUE, BY INDUSTRY SECTOR  
FY 83/84 COMPARED WITH FY 82/83**

INDUSTRY SECTOR		Small Business		Other Business		Total	
		Value \$000	% of Value	Value \$000	% of Value	Value \$000	% of Value
Primary Industry	FY 83/84	14,402	55.0	11,770	45.0	26,172	100.0
	FY 82/83	27,860	75.8	8,871	24.2	36,731	100.0
Manufacturing	FY 83/84	475,390	14.3	2,845,750	85.7	3,321,140	100.0
	FY 82/83	383,659	15.7	2,059,601	84.3	2,443,260	100.0
Construction	FY 83/84	66,226	81.9	14,650	18.1	80,876	100.0
	FY 82/83	50,279	82.5	10,647	17.5	60,926	100.0
Transportation, Communications & Utilities	FY 83/84	41,840	33.4	83,589	66.6	125,429	100.0
	FY 82/83	45,861	26.7	126,198	73.3	172,059	100.0
Trade	FY 83/84	545,840	61.8	337,481	38.2	883,251	100.0
	FY 82/83	495,935	58.0	359,102	42.0	855,037	100.0
Services	FY 83/84	414,963	56.0	326,163	44.0	741,126	100.0
	FY 82/83	402,965	55.1	327,871	44.9	730,836	100.0
<b>TOTAL</b>	FY 83/84	1,558,591	30.0	3,619,403	70.0	5,177,994	100.0
	FY 82/83	1,406,559	33.0	2,892,290	67.0	4,298,849	100.0
No. of Contracts	FY 83/84	185,029	61.0	119,423	39.0	304,452	100.0
	FY 82/83	136,021	57.0	104,641	43.0	240,662	100.0

**Source:** Definitions as per Statistics Canada's Catalogue 12-501,  
December '70: Standard Industries Classification Manual.

## APPENDIX 2

### SMALL BUSINESS SHARE OF DSS CONTRACTS

FY 83/84

TOTAL

Contracts 350,232		Value \$10,563 million	
ABROAD		IN CANADA	
Contracts	16,901	Contracts	333,331
Value	\$899 mil.	Value	\$9,664 mil.
Vendors	5,807		
EXCLUDED <sup>1</sup>		INCLUDED	
Special Recovery	\$mil.	Contracts (91%)	304,452
Capital Projects	4,346	Value (52%)	\$5,178 mil.
Can. Corps of		Vendors	41,788
Comm.	66		
Others	74		
<b>TOTAL</b>	<b>4,486</b>		
OTHER BUSINESS		SMALL BUSINESS	
Contracts	119,423 (39%)	Contracts	185,029 (61%)
Value	\$3,619 mil.(70%)	Value	\$1,559 mil.(30%)

<sup>1</sup> Excluded are contracts for Special Recovery Capital Projects, procurements from non-business establishments such as Crown corporations, firms whose employment size and type of business could not be identified, and low dollar value contracts (less than \$250 in DSS regional offices) for which it proved uneconomical to collect, code, and retrieve the data required for this study.



## **REGIONAL DISTRIBUTION**

### **PURPOSE**

To assess federal government regional purchasing activities to determine if:

- provinces are receiving their fair share of federal government purchasing; and
- there is a capability in various provinces to allow for an increase in their share of federal procurements.

### **BACKGROUND**

The effect of government procurement on jobs and small business is significant. Department of Supply and Services (DSS) contracts alone generated or maintained nearly 200,000 jobs in the fiscal year 1982-83 in Canada (based on an average rate of 44 jobs for every \$10 million in DSS contracts).

The more than 300,000 purchases in any given year by DSS valued at less than \$10,000 are significant to many small businesses, as the study team was told repeatedly in interviews with small business suppliers.

DSS has been attempting to buy more of its supplies through its regional offices to achieve faster service with lower operating costs, and to provide more opportunities for regional suppliers. For the three-year-average period 1980 to 1983, DSS average contract dollar value reached levels of 8.0 per cent for the Atlantic provinces and 14.8 per cent for the western provinces. In Canada, the greatest transfer to a regional office has been to the Capital Region Supply Centre.

### **ASSESSMENT**

Examination of the per capita distribution of DSS procurement dollars (Appendix A) reveals widely varying levels of business in the different provinces. These data show a cumulative total over the period 1979 to 1984 of \$975.31 for each Canadian. Newfoundland, Prince Edward Island, Saskatchewan, Alberta, and British Columbia received

a much smaller share of the business, with these provinces attaining levels of between \$200 and \$400 per capita. The Territories and Manitoba received less than the average, while Nova Scotia, Quebec, and Ontario received more. New Brunswick jumped to above average with its share of the multi-year Canadian Patrol Frigate contract which was awarded in 1983-84.

**Conclusion:** Based on the per capita distribution of government procurement, disparities exist. These disparities may be attributable to a variety of factors, as discussed below.

A study of the federal effort to identify regional sources of supply shows that awareness of federal procurement policies tends to differ significantly by region. In 1983, a survey was sent to 3,500 federal suppliers and responses were received from 1,314. A questionnaire indicated a relative lack of awareness by suppliers outside Ontario. For example, only 4 per cent of Saskatchewan suppliers and 9 per cent of Alberta suppliers reported having a copy of the publication "Selling to Supply and Services Canada", compared to 44 per cent of Ontario suppliers.

The survey also indicated that among respondents, 62 per cent of those contractors with more than 50 per cent of total sales going to the federal government were from Ontario. Although the study did not identify the sector from which these suppliers came, potential new sources of supply and thus enhanced competition may result from more extensive regional sourcing.

The study team conducted a number of meetings with expert panels of representative suppliers, representatives of DSS, and its client departments. These were held in Vancouver, Edmonton, Regina, Halifax, and St. John's. The question of regional procurement was discussed at all ten meetings.

The options expressed at those meetings about procurement procedures suggested the following:

- there are greater costs to taxpayers due to inflexible central procurement policies and practices;
- sourcing equipment locally can be more cost-effective over the long term due to local servicing capability;

- delegated purchasing authorities in the regional offices are too low;
- national bulk buying is often inefficient and more costly; and
- regional supply would be more responsive to user needs.

The consensus among suppliers and government client departments was that DSS does a good job in its regional operations, and that initiatives to expand regional procurement should continue.

Federal Economic Development Coordinators in the Atlantic and western provinces support the strengthening of many departmental regional offices. One way to assist regional offices would be to increase their level of purchasing authority to enable increased purchases from local sources.

Limitations may exist for the government to increase their purchases in certain provinces.

An examination of the provincial distribution of procurement dollars over a three-year period in relation to other economic indicators is contained in Appendix B. The regional distribution of purchasing will ultimately be restrained by available manufacturing industries capable of supplying government needs. Therefore, manufacturing capability must be examined.

In comparing the distribution of government purchases with selected provincial indicators listed in Appendix B, the study team found that:

- for all indicators, Alberta and British Columbia supplied less than their share to the government in relation to their overall population, their manufacturing capability, and the number of federal employees. New Brunswick, too, supplied less than its share except that it came out even in the comparison of DSS contracts to value added in manufacturing; and
- Newfoundland and P.E.I. supplied less than their share in proportion to population factors, but more in proportion to manufacturing industry capability.

Examination of other Statistics Canada data on major industrial groups indicates a lack of capability in certain jurisdictions, notably in Newfoundland and Prince Edward Island, but this was not as apparent in other provinces. The Economic Council of Canada (ECC) in its 1984 study Western Transition, found that the Prairies have narrowed their manufacturing employment gap with central Canada considerably. The change is not due to the growth in resource-associated manufacturing such as petrochemicals, but more so because of a decline in the relative importance of manufacturing in central Canada. By contrast, on the Prairies manufacturing grew somewhat. Moreover, that growth was spread broadly across a majority of the manufacturing industries.

The Canada West Foundation, in its July 1985 study on interprovincial trade, states that, while Western Canada shipped \$3.5 billion worth of processed products to other markets in Canada in 1979, it received a total of \$13 billion in manufacturing shipments from the rest of Canada, producing a balance of trade deficit of \$9.5 billion in this sector. However, the West fared considerably better in international markets. Although it recorded a balance of trade deficit of \$1.6 billion with the rest of the world, trading volumes were very high with exports and imports of \$11 billion and \$12.6 billion in 1979 (in the Manufacturing Sector).

Even though regions outside central Canada have recently developed an increased manufacturing capability, this apparently has not resulted in a uniform distribution of federal procurement. This may be due to failure to use regional suppliers, or it may relate to the types of products purchased by the government or a number of other factors.

**Conclusion:** Further economic base data, broken down by sector, must be gathered and reported province by province so that government can get a clear picture of its manufacturing capabilities. These data would show current capability and would indicate which areas may need economic development initiatives if further sourcing is to be possible. The pending update of the 1979 federal-provincial study "The Size and Structure of the Public Sector Market" could include these data.

Current statistics from DSS are sometimes misleading. Much of the transfer to regional operations has been to the



National Capital Region and the Washington Region. However, the dollar value level of procurement in the Western and Atlantic regions steadily improved from 1979 to 1984.

Conclusion: With more contracting out, with the continued decentralization of certain departments (e.g., HWC, DVA, EIC), and with the many billions of dollars planned for major Crown projects, opportunities exist for increased regional procurement from internationally competitive industries.

## **OPTIONS**

The study team recommends to the Task Force that the government consider the following measures to provide for a more accessible and fair procurement system and to enhance participation by regional suppliers in government contracts:

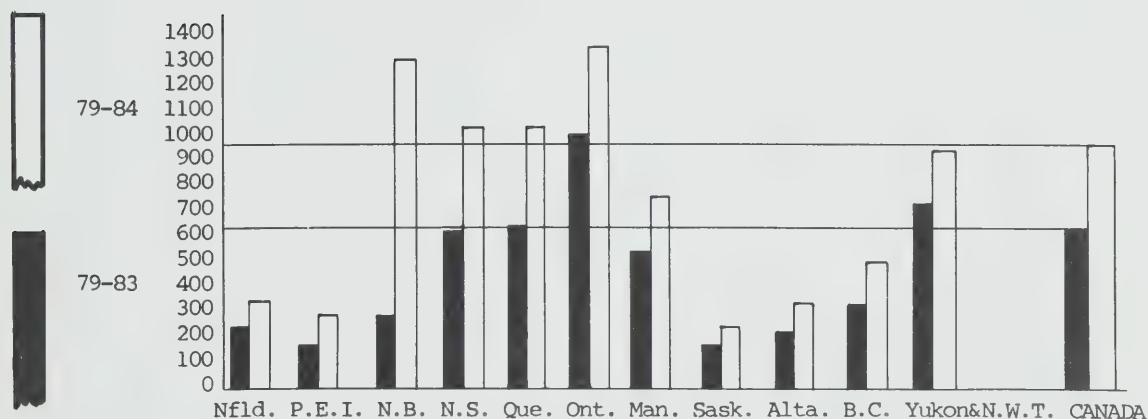
- a. develop statistical information on supplier capability in relation to government's needs and, based on this information, establish realistic objectives for regional sourcing, and
- b. include a breakdown of annual federal purchasing by province, for inclusion in the publication entitled "The Size and Structure of the Public Sector Market".

The government should also consider reviewing internal delegation of departments' requisitioning authority to regional offices and where appropriate, with a view to ensuring efficiency by purchasing closer to the point of use and to ensure accessibility to regional and small businesses, prepare a statement of existing delegation and proposed delegation changes.

## PER CAPITA EXPENDITURES (DSS) BY VENDOR LOCATION IN CANADA 79-84

	79-80	80-81	81-82	82-83	79-83	83-84	79-84
Canada	\$102.09	\$212.71	\$166.08	\$173.46	\$654.34	\$320.97	\$975.31
Newfoundland	\$46.38	\$40.70	\$62.74	\$83.33	\$233.15	\$99.57	\$332.72
P.E.I.	\$25.72	\$44.88	\$42.15	\$64.88	\$177.63	\$106.25	\$283.88
Nova Scotia	\$121.45	\$117.50	\$162.61	\$209.36	\$610.92	\$395.32	\$1006.24
New Brunswick	\$37.79	\$64.20	\$98.68	\$85.58	\$286.25	\$1001.75	\$1288.00
Quebec	\$94.34	\$164.86	\$178.32	\$182.66	\$620.18	\$389.14	\$1009.32
Ontario	\$156.12	\$315.72	\$244.65	\$258.27	\$974.76	\$366.48	\$1341.24
Manitoba	\$70.54	\$162.95	\$149.61	\$152.59	\$535.69	\$215.49	\$751.18
Saskatchewan	\$34.74	\$53.18	\$53.66	\$37.14	\$178.72	\$68.21	\$246.93
Alberta	\$47.07	\$67.92	\$53.74	\$54.75	\$223.48	\$99.49	\$322.97
British Columbia	\$52.29	\$125.64	\$75.22	\$73.97	\$327.12	\$172.70	\$499.82
Yukon & N.W.T.	\$110.07	\$188.90	\$162.90	\$257.11	\$718.98	\$239.04	\$958.02

GRAPH I - 79-84



- 83-84 - Federal Sales Tax and Contingency Allowance on C.P.F. project excluded in 1983-1984 data. 50.883 million in unplaced C.P.F. contracts included in Canada total but not in any province. C.P.F. project broken down by province. Low dollar value contracts totalling \$74 million excluded because of cost of data retrieval (0.84% of total).
- 82-83 - Excluded are procurements from non-business establishments such as Crown Corporations, firms that could not be identified, and low dollar value contracts (less than \$250 in DSS regional offices) for which it proved uneconomical to collect code and retrieve the data required for this study. The total excluded is \$89 million (2.03% of total).
- 81-82 - The same exclusions as in 82-83 for a total of \$32 million (0.78% of total).
- 80-81 - The same exclusions as in 82-83 for a total of \$102 million (3.05% of total).
- 79-80 - The same exclusions as in 82-83 for a total of \$172 million (6.58% of total).

DISTRIBUTION OF DSS PURCHASES BY PROVINCE OF SUPPLY VS. SELECTED PROVINCIAL INDICATORS (1980-83)<sup>1</sup>

PROVINCIAL INDICATORS <sup>2</sup>	ATLANTIC				PRAIRIE				BC		YUKON & NWT	TOTAL
	NEFD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA			
1. DSS Contracts: three-year average FY 80/81, FY 81/82 FY 1982-83	1.1	0.2	5.3	1.4	31.4	45.5	4.1	1.2	4.5	5.0	0.3	100.0
2. Provincial Population	2.3	0.5	3.5	2.9	26.4	35.4	4.2	4.0	9.2	11.3	0.3	100.0
3. Total Provincial Labour Force	1.8	0.5	3.1	2.5	25.0	38.1	4.1	3.8	9.7	11.4	—	100.0
4. Provincial Labour Force Employed	1.7	0.4	3.0	2.4	24.2	38.6	4.2	3.9	10.1	11.5	—	100.0
5. Manufacturing Employees in Province	1.0	0.2	2.0	1.7	28.2	49.6	3.1	1.2	4.7	8.3	(a)	100.0
6. Provincial Gross Domestic Products	1.2	0.3	2.2	1.8	22.7	37.8	3.7	4.3	13.4	12.3	0.3	100.0
7. Provincial Value Added in Manufacturing	0.8	0.1	1.6	1.4	27.2	51.0	2.7	1.1	5.5	8.6	(a)	100.0
8 Provincial Value of Shipments in manufacturing	0.7	0.1	1.9	1.8	26.2	50.0	2.6	1.3	7.1	8.3	(a)	100.0
9. Federal Employees	2.3	0.7	8.4	3.4	18.9	40.0	4.7	3.1	7.3	10.3	0.3	100.0

<sup>1</sup> These purchases are based on the province of origin, not by the province in which the orders were placed.

<sup>2</sup> Underlined figures show provinces in which the selected indicator is higher than the proportion of federal government procurement (Line 1)





## SECTION 5 - THE PROCUREMENT LEVER

### OVERVIEW

#### INTRODUCTION

The study team would like to be able to say that significant benefits in terms of long-lasting jobs and enhanced competitiveness of Canadian industry have been realized from the billions of dollars spent on major capital purchases over the past ten years. Unfortunately, this is not the case.

The team would also like to be able to indicate that, with existing policies and mechanisms, and a little bit more patience, things will get better. Unfortunately, this is unlikely.

Since 1978, administrative mechanisms have been in place for managing industrial benefit programs for all procurements in excess of \$2 million. Procurements in the \$2 million to \$100 million range are administered under a special Procurement Review Mechanism. Major Crown projects (over \$100 million) are managed by interdepartmental project offices and Senior Review Boards. In both cases, there are a multiplicity of departmental players. The system should work in such a way that elected officials, public servants and industry suppliers have a clear understanding of what government will be buying in the long term, what it hopes to achieve with those purchases, and how industry can become involved. It should create lasting jobs, industrial development, and national wealth in the process.

There exists a confusing array of uncomplementary objectives, a multiplicity of players, an industry that is not sufficiently involved (and concerned about it), a lack of long-term planning, and an overlapping departmental mandate problem.

For major Crown projects, less than 50 per cent of the value of such projects has been manufactured in Canada. Over the next ten years, these projects are estimated to amount to \$27 billion. Even a modest shift in this percentage to Canadian sources would have important consequences in terms of high-paying, long-lasting jobs. But, it will not be easy because the industries involved are defence-related and only those companies that are internationally competitive can be expected to survive. The

payoff, though, is highly attractive. For every dollar of defence-based goods purchased from domestic sources by the government, another \$4 are exported.

### **Observations in Respect of Policy**

The primary objective of any procurement is to acquire equipment and services to meet the needs of operating departments, while achieving the best value for money. But the government also recognizes that certain secondary benefits - among them regional and industrial development - can and should be considered in large value government procurements.

In its review of procurement-related industrial benefit policies, the team has made the following observations:

- no one associated with the procurement process has a clear idea what industrial benefits government is trying to achieve. The problem is not a lack of objectives, but a multiplicity of overlapping, competing objectives that convey confusing signals to both government and industry;
- there is a growing dissatisfaction among departments, particularly the Department of National Defence (DND) and Transport Canada (TC), that their operational needs are being jeopardized by ad hoc, third-party decisions of other departments;
- the government's expectations have tended to be unrealistic and misdirected. Regional distribution, technology transfer, and investment benefits have been much lower than expected and for the most part have been of short-term value. Moreover, existing policies may be inadvertently signalling that short-term benefits are preferred over long-term, lasting benefits;
- our policy emphasis on "offsets" with foreign firms of at least equal value to contracts awarded has become a trade irritant with the U.S. and Europe. While producing important short-term job-creation benefits, little real long-term benefit is evident;
- major suppliers to government are confused and concerned. Consultation and pre-notification of major procurements is sporadic, ill-timed, and insufficient. The coordination of R&D and procurement policies and programs has been lacking, particularly at the product development stage, with the result that Canadian industry would be severely

- inhibited in competing effectively, even if it had proper advance notice;
- in any event, no one in government has a strategic, government-wide plan for the use of procurement as a lever to generate long-term, lasting benefit. Indeed, the team has observed that existing government financial planning systems currently look ahead only three years (when a longer financial planning horizon is feasible) and are remarkably ineffective in identifying industrial development goals and ways of prepositioning Canadian industry to achieve them; and
  - while a comprehensive agreement with the U.S.A. providing for national treatment in procurement would significantly limit the ability to use procurement as a lever for economic and regional development, the proposed approach would be an improvement over the current situation and could be applied until such an agreement was concluded. This proposal would also continue to apply to those sectors not covered by such an agreement.

### **Observations in Respect of Process**

Attempts have been made over the last five years to accomplish some form of coordinated planning to optimize the use of procurement to support the achievement of national objectives. They have had only marginal success.

The Major Crown Project Management policies introduced in 1980 have been effective in improving cost and schedule control for individual projects over \$100 million, but they have not adequately addressed coordinated long-range procurement strategies for the overall inventory of projects under development.

The Procurement Review Mechanism, initiated in 1980 to review the industrial benefit implications of \$2 million - \$100 million procurements, has been hindered by a lack of adequate long-range capital acquisition data; a multiplicity of departmental objectives, priorities, and players around the table, and the placing of decision-making with what was possibly an inappropriate Cabinet Committee.

Finally, the Department of Supply and Services (DSS) sponsored Annual Procurement Plan and Strategy (APPS) - an attempt to identify interdepartmental opportunities and bring them to Cabinet's attention - has been a useful



document for DSS management. In effect, it has partially filled a vacuum left by the Department of Regional Industrial Expansion's relative lack of attention to this area. However, in addition to its lack of support from a long-range plan, the broader success of APPS has been hindered by the fact that DSS, as a common service agency, lacks the mandate to advise Cabinet on policy related to industrial and regional development. The plan has been of generally little use to Cabinet or to industry in the identification of broad-range opportunities and strategies.

### **Remedial Action**

The study team is of the view that a number of fundamental reforms are required if Canada is to receive better value from government's large capital expenditures over the next 10 to 15 years. Highlights of these necessary reforms include:

- the need to sort out the multiplicity of overlapping, competing objectives. The secondary objective related to major procurements should be industrial and regional development to enhance the international competitiveness of Canadian-based industry. Clear Cabinet support for this focus needs to be communicated to departments;
- the need for Cabinet to review on an annual basis a coordinated strategic acquisition plan that identifies procurement-related opportunities to support the above objective that are likely to arise over the ensuing eight to twelve-year period;
- the need to clarify the roles and responsibilities of the many departmental players now often operating at cross purposes. An interdepartmental central coordinating group should be established and, among other things, be given the mandate to follow Cabinet's direction in the annual submission of the strategic acquisition plan;
- the need to develop specific ongoing mechanisms for consultation with industry on major procurement opportunities, with sufficient built-in lead times;
- the need to target better and integrate government R&D funding programs with procurement activity; and
- the need to revise certain institutional relationships necessary to give effect to the above.

In proposing these reforms, the study team was guided by two fundamental principles:

- opportunities related to the consolidated procurement program are significant and require regular Cabinet review; and
- ongoing and open consultation with industry will enhance opportunities for increased Canadian industry participation in the many billions of dollars worth of government capital equipment purchases in the coming period.

We are convinced that both of these principles are sound. Major procurement projects have been identified by individual departments in the common areas of ships, space, and vehicles. In the past, benefits associated with projects in these and other common areas have been considered on a case-by-case basis, and opportunities have been missed. We believe that Cabinet's review of a coordinated strategic acquisition plan can identify focused industrial benefit priorities, focused R&D support, development and sourcing strategies related to life-cycle support, opportunities for technology transfer, and other lasting benefits.

What has been lacking in the past is a mechanism to do this. The strategic acquisition plan provides such a mechanism. Moreover, early and open consultation with industry and properly phased R&D support have been tried, albeit in rare cases, with very positive results. Over the past decade, DND has funded industry to develop a number of shipboard electronic subsystems that have subsequently been selected for the Canadian Patrol Frigate program. The wider application of coordinated consultation and R&D strategies is feasible and warrants Cabinet support.

### **Crown Corporation Procurement Policy**

In its Terms of Reference, the study team was instructed to do a limited review of the procurement policies of the larger Crown corporations to determine whether those policies are sufficiently supportive of national objectives. The team is generally satisfied with the efforts of those corporations reviewed to use their major procurement programs to support Canadian industry. Although the question is outside our Terms of Reference, we do not believe that the development of an omnibus industrial

benefit/procurement policy for the wide diversity of Crown corporations would be useful.

### **Cooperative Federal-Provincial Procurement**

The three levels of government in Canada spend some \$60 billion a year on goods and services. A significant portion of this expenditure is accounted for by imports, with the balance often provided from highly fragmented domestic supply sources. Greater coordination among the three levels of government in procurement could support the establishment of additional Canadian manufacturing capability. What is needed is an initiative to gather information about public sector procurement and to identify commodities that are now imported but where there are existing or potential sources of supply in Canada. Greater cooperation on exchanging source lists, standards, and procurement methods increase opportunities for suppliers to do business across Canada and should lead to better management of the public sector procurement system.

## **LONG-TERM INDUSTRIAL BENEFITS FROM MAJOR CROWN PROJECTS**

### **PURPOSE**

To examine the federal government's practice of pursuing secondary policy objectives as part of major capital equipment procurements, and to recommend a change in approach to improve the industrial benefits realized by Canada from government procurement.

### **BACKGROUND**

The following terms are used in describing the use of procurement to achieve government policy objectives:

- leverage - the bargaining power resulting from the government's immense procurement expenditures;
- national objectives - broad socio-economic objectives, endorsed by Cabinet, toward which the government's procurement leverage should be directed;
- socio-economic benefits (SEBs) - the benefits derived from pursuit of any or all of the national objectives. This term is associated with the Procurement Review Mechanism (PRM) covering procurements in the range \$2 to \$100 million; and
- industrial benefits (IBs) - a subset of SEBs more specifically related to industrial and regional development objectives and associated with major Crown projects (MCPs), which are generally in excess of \$100 million.

In 1984-85, the value of contracts for goods and services issued by the federal government exceeded \$9 billion. Much of this procurement relates to the acquisition of high technology equipment, including that required to meet the needs of the Department of National Defence (DND). Since the cancellation of the AVRO Arrow in 1959, the government has purchased the majority of its major equipment "off-the-shelf" from foreign companies through production of existing designs. It has sought to minimize the negative impact of large foreign purchases on the Canadian economy, initially through the Defence Production Sharing Agreement with the United States and in recent years through industrial benefit packages negotiated on a case-by-case basis with foreign bidders.



Industrial benefits have been pursued to meet policy objectives secondary to the major procurements (like the CF-18 fighter aircraft) themselves, including build-to-print production (i.e., production of products originally designed elsewhere) for the project or offset procurements to help balance equipment supplied to Canada by the foreign supplier; regional distribution of procurement; small business participation; technology transfer; and new investment in Canada. The government has usually attempted to acquire IBs of 100 per cent of contract value and equal technology. The motivation for seeking industrial benefits has increased for DND procurements in particular because that department's annual capital equipment expenditures have climbed from \$250 million in the early 1970s to the current level of \$2.5 billion.

As experience has been gained through successive major Crown projects (MCPs) such as the Long Range Patrol Aircraft (LRPA) Program, the CF-18 Fighter Program, the Radar Modernization Project (RAMP), and the Canadian Patrol Frigate (CPF) Program, industrial benefit packages have become increasingly comprehensive in the range of short- and long-term objectives. They have also become increasingly specific in the obligations that are negotiated into contracts.

While some progress has resulted in the achievement of industrial benefits related to MCPs, there is still a need to reassess government policies and practices related to the procurement lever, based upon the following considerations:

- The government's expectations of securing 100 per cent offsets of equal technology to the equipment being procured have been unrealistic. Benefits acquired have been much lower than expected and have mostly been of short-term value to Canada. Costs of achieving industrial benefits have not been easily ascertained and have been substantial.
- While some benefits of lasting value to Canada have resulted, these have not been as significant to Canadian industrial development as had been anticipated.
- The growing deficit in U.S.-Canadian defence trade is a major concern and will persist with the increase in the number of planned MCPs. A relative decline in the technology base of Canadian industry is a key factor in the increasing deficit. The potential contribution of appropriate industrial benefit policies to this problem must be addressed.

- The emphasis on offsets in Canada's industrial benefits programming has become a trade irritant with the United States and Europe while producing marginal long-term benefit to Canada.
- There are linkages among these factors which point the way to changes which will produce greater net benefits to Canada, while reducing irritants and costs.

The study team has analyzed the issue of procurement as a lever for MCPs by reviewing existing documentation and current government activities, and interviewing industry associations and government officials. Results of industry association interviews are summarized in Appendix A.

## **ASSESSMENT**

While this discussion focuses on industrial benefits and regional distribution, the primary objective of any procurement is to acquire the equipment and services to meet the needs of the operating department while achieving the best value for money.

All other objectives are secondary. Where secondary objectives are being pursued, the incremental costs and benefits of achieving the additional goals should be clearly identified. In past procurements, including the frigate program, it has proven extremely difficult to assess the true costs and benefits of IB programs.

There is unease within departments, particularly DND and Transport Canada (TC), about building viable, long-term sources of supply and maximizing competitive procurement. A recent case is the second phase of the Ship Replacement Program. DND incurred a cost in Phase 1 to establish in Canada a systems integration company. It assumed, no doubt, that this company would take on the systems integration work for subsequent phases, thereby assuring a strategic source of supply for this and perhaps other projects. DSS, on the other hand, seeks to promote competition and favours competition for Phase 2. Such concerns need to be addressed at the time of the initial procurement if such interdepartmental conflicts are to be avoided.

No direct answer exists to the question of which secondary objectives should be pursued. As a result, private and public sector managers have lacked clear

direction as to what the government has been trying to accomplish with industrial benefits programming.

Broad policy guidelines on which national objectives should be followed are contained in TB Chapter 305 "Procurement Review Mechanism". Overlapping national objectives are contained in the DSS Annual Procurement Plan and Strategy (APPS). For each major Crown project, specific objectives, heavily influenced by the experience of the previous project, are agreed to by Ministers and used as the basis for negotiations with industry. These latter statements contain multiple and often mutually exclusive objectives. Examples of CF-18 and CPF objectives, Chapter 305, and APPS objectives, are attached in Appendix B. The study team has identified more than 40 separate objectives in these and other documents.

There are no indications of the relative importance to the government of any of these objectives. The impression is left that all are equally important and benefits in all areas should be maximized. In the absence of a focus on long-term benefits, proposals and negotiated contracts have tended to emphasize short-term benefits. In the frigate program, for example, detailed financial penalty clauses relate to Canadian content obligations which produce short-term job creation benefits. The obligation of Sperry to establish Paramax as a permanent viable centre for combat system design and integration, however, is not subject to the same penalties. The government may have thus inadvertently signalled that short-term benefits are preferred over lasting benefits. Whether true or not, it is in the contractor's interests to put his greatest management effort into avoiding penalties for shortfalls in short-term requirements.

**Conclusion:** A need exists for a much clearer purpose in the direction given by Ministers for industrial benefit strategies for major Crown projects.

Six billion dollars worth of benefits were negotiated for the Long-Range Patrol Aircraft (LRPA), CF-18, and frigate programs. This represents, however, only broadly defined government objectives and contractors' commitments. This figure has been shown in some cases to be a gross overstatement of expectations of what will ultimately be achieved in terms of incremental economic activity in Canada, directly caused by the procurements. Studies indicate that it will be almost impossible to establish



precisely the benefits which can be proven to have been incremental to the projects and caused by the contractors as a result of the contracts. It has been established, however, that for these recent projects:

- of the \$2.45 billion industrial benefits negotiated with the McDonnell Douglas Aerospace Corporation (MDAC), \$1.4 billion of work for McDonnell Douglas Canada and Litton Systems would likely have occurred without the award of the CF-18 contract. In addition, there is evidence that some sub-contract work, claimed as offsets, was not caused by the CF-18 contract. This generic problem of causation will exist as long as offset (indirect) benefits are demanded;
- most benefits achieved have been of a short-term, build-to-print nature to keep production lines busy;
- little technology transfer and investment benefits, which enhance the international competitiveness of Canadian industry, have been realized. Exceptions include the CGE Blade and Vane plant in Bromont, Quebec, \$100 million (related to the CF-18 program); the expanded facility of Raytheon Canada at Waterloo, Ontario, \$200 million (under RAMP); and the Paramax combat systems design integration and project management capability in Montreal (established by Sperry for the CPF program);
- regional distribution benefits have not met expectations. Except in the case of the frigate program, when government has been willing to pay a premium or when contractual commitments to specified regional distributions are made, the distribution of work reflects the natural market structure of industry. Industry is generally opposed to any forced distribution which increases production costs and reduces international competitiveness; and
- offsets negotiated by Canada with U.S. contractors for LRPA and CF-18 programs and with European and U.S. contractors for the frigate program have been an irritant to our major trading partners.

Government has in the past underestimated both direct and hidden costs of industrial benefits negotiated into major procurement contracts. It has been conservatively estimated that administrative and direct program costs of \$375 million related to the three programs, including \$250 million for the frigate program, have been incurred to secure industrial benefits. Of the direct incremental costs



identified for the CPF program, \$70 million was attributed to the cost premium associated with the decision to spread the shipbuilding effort among three shipyards. In addition, there are hidden costs which cannot be quantified. Overall, it is estimated that the cost premium related to securing industrial benefits has been about 5 to 10 per cent.

Conclusion: The procurement lever has not effected the anticipated broad range of industrial benefits.

To improve the government's approach to industrial benefits, one must understand why the current approach has not worked well. Although the government has tried to secure long-term benefits for Canada from foreign contractors bidding for major procurements, success has been restricted because of the small Canadian domestic market compared with the world markets served by these contractors. McDonnell Douglas does not have a strong business motivation to transfer CF-18 technology to Canada for a purchase of 138 aircraft when its overall market is more than ten times larger. Thus, while the multi-billion dollar CF-18 contract is large for Canada, it has attracted mostly short-term, build-to-print offset work which was relatively easy for McDonnell Douglas to place competitively in Canada. CGE's and Raytheon's modest long-term investments made good business sense in the judgement of those companies but are rare in relation to Canadian procurements.

The difficulties in attracting technology and investment to Canada through government procurement cause concern. The export of manufactured products is of the greatest importance to Canada. Our ability to compete internationally, however, is tied directly to the state of technology in our industries.

Defence equipment procurement represents more than half of all Canadian government purchasing and approximately 80 per cent of major capital procurements. Here the procurement lever to support industrial development is particularly feasible.

Figures provided by the Air Industries Association of Canada show that Canadian government procurements represent only 20 per cent of the sales of Canadian defence equipment contractors. The remainder is exported, mostly to the United States. DND purchases 70 per cent of its capital equipment abroad. By comparison, the U.S. Department of

Defence purchases more than 95 per cent of its equipment through domestic sales. Major European countries, including Britain, France, and Germany, purchase a much higher percentage of defence equipment domestically than does Canada. Canada is unique among its major defence partners in the export dependency of its defence industry.

Similar conclusions can be drawn about non-defence industries which supply major manufactured goods to the Canadian government.

The reality of the importance of export markets and of enhancing the international competitiveness of Canadian industry is central to several industrial programs, policies, and organizational characteristics of the Canadian government. However, industrial benefit packages associated with Canadian government procurement have not been clearly focused on the long-term export-oriented thrusts of these other government policies and programs.

Long-term, wealth creating, industrial development is not limited to export-oriented product development. Lasting benefits can be achieved from domestic repair and overhaul, spare parts manufacturing, and other forms of product support of major equipment with a life span of 20 years or more. Not only are long-term jobs created, but repair and overhaul contracts are important springboards for new products or service ventures by Canadian industry.

Garrett Manufacturing Ltd. is the most notable example of a Canadian company which had its origins in repair and overhaul. It is now a world leader in the design and manufacturing of aircraft temperature control systems and other electronics products. Major opportunities have been missed by the Government of Canada in securing lifetime support capabilities for major programs such as LRPA and CF-18. The high costs and risks associated with inadequate operational support of these aircraft are of primary concern to government. But the missed industrial and regional development opportunities are also very significant. Departments appear recently to have become more sensitive to these problems. The study team concludes that increased attention is required to provide lifetime support in MCP planning to minimize cost and risk to operational phases of programs and to ensure that Canadian industrial opportunities for participation are addressed.

Federal government procurement is often cited as a potential lever for improving the adequacy of the defence industrial base. It is important to distinguish between promoting defence industrial activity generally and establishing, in Canada, specific industrial capabilities necessary for Canada's national security. The latter is the subject of formal studies by DND and DSS (Appendix C). The study team, in the absence of definitive requirement statements, was unable to draw any conclusions which would result in proposals for change at this time.

**Conclusion:** A new strategy is needed if Canada is to be successful in using procurement as a lever to generate long-term benefits. The strategy must be sharply focused on improving the competitiveness of Canadian-based industry in world markets. It must result in the advancement of technology, greater investment in Canadian industry, and improved access to domestic and foreign markets. A major element of the strategy should be to preposition Canadian industry for procurement to the maximum when domestic and associated export opportunities are attractive.

The study team endorses the current initiatives of the Department of Regional Industrial Expansion (DRIE) to develop such a strategy.

## **OPTIONS**

The study team recommends to the Task Force that the government consider developing an industrial benefits policy for federal procurement which will:

1. enhance the international competitiveness of Canadian industry, by establishing long-term industrial and regional development as the primary national objective for major procurements;<sup>1</sup> and
2. take into account the potential for Canadian industry to participate in the servicing of major equipment purchases during their operational life.

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<sup>1</sup> National Objectives, established by Cabinet in 1978 and elaborated by TB in 1979/80, are listed later in this report.



**THE INDUSTRY VIEW OF PROCUREMENT AS A LEVER**

To summarize the views on the use of procurement to achieve national objectives as expressed during interviews with Canadian industry associations.

The impact of government procurement varies widely across the spectrum of Canadian industry. Eight industry associations were therefore selected to provide the broadest range of perspectives on procurement issues. Interviews were conducted with:

- Air Industries Association of Canada (AIAC);
- Canadian Advanced Technology Association (CATA);
- Canadian Business Equipment Manufacturers Association (CBEMA);
- Canadian Export Association (CEA);
- Canadian Manufacturers Association (CMA);
- Canadian Ship Building and Ship Repair Association (CSSRA);
- Electrical and Electronic Manufacturers Association of Canada (EEMAC); and
- Machinery and Equipment Manufacturers Association of Canada (MEMAC).

The principal conclusions drawn from these discussions are as follows:

- Government procurement should be used selectively to enhance long-term international competitiveness of Canadian industry.
- Attempts to achieve multiple socio-economic objectives through government procurement have worked against the competitiveness of Canadian industry in international markets by focusing on short-term activity which does nothing to give the industry a comparative advantage. In particular, industry is concerned about negative industry productivity effects of forced regional work distribution.
- Canadian industry requires much longer lead time (typically several years) to prepare to bid for major Canadian government equipment purchases. In addition, industry needs more access to funded R&D specifically targeted at future procurement.



- Centres of excellence and preferred sources should be encouraged under a realistic set of criteria which recognizes the specialization of Canadian industry.
- The Defence Industry Productivity (DIP) program should be strengthened and made applicable to domestic defence and non-defence product development. The government should consider increased levels of R&D funding support to enable Canadian industry to compete better with U.S. industry.
- Improved mechanisms for government and industry procurement-related interaction are required.
- The roles of government departments should be clarified and more effectively communicated to industry. Better coordination of marketing efforts related to U.S. government is required.
- The government has a key role to play in reducing interprovincial barriers to trade resulting from provincial procurement practices.

EXAMPLES OF STATEMENTS OF NATIONAL OBJECTIVES  
RELATED TO GOVERNMENT PROCUREMENT

A. TREASURY BOARD ADMINISTRATIVE POLICY MANUAL

Chapter 305 - Procurement Review  
Section 2.1 - Objectives

PROCUREMENT REVIEW MECHANISM

Objective

The objective of the Procurement Review Mechanism is to obtain lasting benefits from the federal procurement activity beyond the immediate impact of the procurement expenditure itself, toward the economic or social development of Canada.

Sub-objectives are:

- a. to concentrate initially on industrial benefits, particularly in the electronic and other high technology sectors;
- b. to foster those initiatives that would be competitive in world markets or in the domestic market with normal levels of protection;
- c. to stimulate new product innovation and improvements in production technology;
- d. to provide improved opportunity for sub-contracting to Canadian suppliers, particularly small businesses and suppliers in regions of high unemployment.

B. DSS ANNUAL PROCUREMENT PLAN AND STRATEGY - 84/85

National Objectives

The Supply Administration is dedicated to achieving higher and more consistent levels of customer service, greater economy of its internal operations, and more effective management of the supply program. The initiatives proposed in this document will make an important contribution toward the more effective management of the supply program.

contribution toward the more effective management of the supply program.

Within the context of its overriding concern for "best value purchasing", the Supply Administration pursues a number of socio-economic objectives which are the current policy of the federal government. The following approved National Objectives form the basis for the 1984-85 Annual Procurement Plan and Strategy:

1. **INDUSTRIAL SOURCE DEVELOPMENT** aims to assist and support industrial development through productivity improvement; encouraging the establishment, expansion, and modernization of production facilities; promoting the development of domestic sourcing to increase market opportunities; supporting industrial renewal; achieving industrial benefits from resource projects; and supporting job creation and entrepreneurship.
2. **REGIONAL SOURCE DEVELOPMENT** is designed to stimulate national economic growth and help reduce regional disparities through increased investment in and promotion of industrial development and trade.
3. **INTERNATIONAL COMPETITIVE ENVIRONMENT** The Government of Canada believes that Canada's economic interests and those of her trading partners are best served by the preservation and renewal of the international trading order.
4. **FEDERAL-PROVINCIAL RELATIONS** This objective provides for cooperation and consultation between the federal and provincial governments in the economic development field to avoid duplication of programs and expenditures and encourage expansion of the Canadian market.
5. **MULTINATIONAL ENTERPRISES** The federal government's objective is to ensure that foreign-controlled corporations, as well as their Canadian counterparts, contribute fully to the development of an internationally competitive and innovative industrial structure and also to pursue Canadian objectives in areas such as research and development and international marketing with equal vigour.
6. **EMPLOYMENT GROWTH AND JOB OPPORTUNITIES** will reduce unemployment and provide support to sectors hard hit by

the past recession. The aim of reducing unemployment should be especially focused on the problems facing youth.

7. **PRODUCTIVITY** Promoting increased productivity in Canada presents a means of achieving the federal government's anti-inflation and job creation objectives simultaneously.

#### **C. CF-18 INDUSTRIAL BENEFITS OBJECTIVES**

The objectives of the New Fighter Aircraft industrial benefits program, within the limits of acceptable cost constraints, are to generate compensating Canadian industrial activities which will:

- a. minimize the economic cost of the program to Canada;
- b. establish a Canadian industrial capability including engineering cognizance for lifetime support of the aircraft weapon system procured;
- c. improve the capabilities of Canadian industry by stimulating technological advancement through the transfer of technology and the exercise of Canadian resources in the areas of design, development, and manufacturing;
- d. improve the competitiveness of Canadian industry and its access to world markets by establishing its autonomy in selected manufactured products and services;
- e. provide a suitable workload to utilize the resources of Canadian industry in order to meet government objectives of stable employment and regional distribution of industrial activity;
- f. stimulate Canadian exports consistent with trade and foreign policy objectives, particularly in those areas which have been the recipient of substantial government assistance; and
- g. reverse or reduce Canadian imports in aerospace products and other manufactured goods and services.

#### **D. CPF INDUSTRIAL BENEFIT OBJECTIVES**

The overall industrial benefit objective in the Canadian Patrol Frigate Program is to ensure that Canada obtains maximum industrial benefits as a result of the procurement. In this respect, the objective is to generate



Canadian industrial activities and improve the capabilities of Canadian industry by the following:

1. The stimulation of its technological advancement through transfer of technology to Canada and its exploitation from a Canadian industrial base.
2. Maximizing the opportunities for employment of Canadians by ensuring that Canadian workers benefit to the greatest extent possible from the employment opportunities created by the provision of goods or services.
3. The use of Canadian resources in performing the maximum practicable program management, ship design and construction, system design, production, analysis and test work in Canada with the result that this capability will be established and retained in Canada and be completely autonomous with respect to technology and markets that can be pursued.
4. The establishment of a competent Canadian industrial base for lifetime support of the Canadian Patrol Frigate Program.
5. R&D in any field of advanced technology in Canada which will result in significant continuous activities culminating in or related to product management so as to attain Canadian industrial autonomy for such products and related services in worldwide markets.
6. The expansion of opportunities for Canadian industry to compete internationally in selected manufactured products and services and thereby stimulate exports and reduce imports.
7. Developing small business in Canada.
8. Ensuring equitable regional distribution of industrial benefits.
9. Providing offsets for that portion of program expenditures made outside Canada and not recovered through CPF-related work sub-contracted back to Canada.
10. Using the resources of the relevant Canadian industry sectors in a manner consistent with DITC industrial development policies and objectives for these sectors. These policies and objectives are reflected in the DITC Industry Sector Profile Discussion Papers.

In particular, with respect to electronic systems integration:

1. It is the intention of the government that one or more Canadian-controlled firm(s) participate directly in a significant manner in the electronics systems integration (i.e., by carrying out, as a minimum, the management integration and testing of two or more selected major electronics subsystems such as weapons, sensing devices, instruments, communications and computing, including software) so as to lead to the establishment of a Canadian-controlled electronics systems capability within a specified period of time which is capable of providing an appropriate, continuing and competitive contribution to the life-cycle support of the Patrol Frigate in those areas and to the systems design of future generations of warships and similar applications.
2. If a foreign design is proposed there is to be provision for sufficient participation by a Canadian-controlled firm so as to establish an electronics systems capability which would permit such a firm to make an appropriate, continuing and competitive contribution to any modification of that design, to the life-cycle support of the Patrol Frigate and to the systems design of future generations of warships and similar applications.
3. Canadian-controlled firms included to meet the foregoing requirements must be free from any restrictions which would preclude them from being included as a potential participant with either CD Contractor. (A Canadian-controlled firm is a corporation so defined for the purposes of Section 257 of the Income Tax Act, or prepared to become eligible to be so, and which is autonomous as to markets and systems technology with respect to that capability to be established.)

Contractors are expected to carry the usual performance and other commercial risks.

## DEFENCE INDUSTRIAL BASE

### BACKGROUND

Federal government defence procurement is often cited as a potential lever for promoting activity in the development of Canada's defence industrial base.

The discussion of Canada's defence industrial base is often characterized by a debate over two apparently contradictory objectives.

One objective is to promote defence industrial activity generally. Here commercial considerations are foremost.

The other objective often cited is to establish specific industrial capabilities in Canada essential to national security. Here industrial activity can be justified on strategic grounds in the absence of long-term commercial projects.

### ASSESSMENT

#### Extent of the Defence Industrial Base Requirement:

At this moment the adequacy of Canada's industrial defence base to meet its strategic requirements is not fully understood. DND is embarked on a two-year program aimed at identifying the strategic supplier requirement; and DSS is currently undertaking an inventory of domestic defence industrial capability.

Because the studies are not complete, it would be premature to assume that the strategic industrial requirement ultimately identified by DND will be significant. Close proximity to American sources, combined with the high cost of establishing unique Canadian facilities, will be key factors influencing industrial base decisions.

#### Defence Considerations in Major Crown Procurements:

As already noted, major defence procurements appear to be one of the most logical ways for establishing and maintaining a domestic industrial defence capability. This can be achieved either, through the direct sourcing of

defence purchases in Canada, or through the requirement of defence-related offsets in major military buys.

Canadian history in the area of defence sourcing has varied considerably since the second World War. A long period of budgetary constraints and a "short war" philosophy saw a move toward "off-the-shelf" procurement with little concern for domestic industrial capability. In retrospect, it has been argued that some major projects such as the CP-140 and CF-18 did not contain adequate specification of systems support requirements. However, in more recent projects the principle of seeking the direct participation of Canadian industry in defence procurements has become well established. It is also accepted that this participation should be specified, where deemed important for national security reasons, as part of the procurement Request for Proposal (RFP), and that where appropriate, premiums should be paid for establishment of the Canadian capability (e.g. as in the case of the CPF). The extent of such Canadian participation is only constrained by the size of the associated premiums, and DND's budgetary priorities.

Existing industrial benefits practice is less directive in the area of non-project-related benefits (offsets), where some of the key industrial benefits negotiated in defence procurements have been non-defence related. From a defence industrial base perspective, this raises the question of whether priority should be given in future to the development of the defence industrial base in all aspects of defence procurements. On the positive side, it has been argued that priority should be given to defence-related benefits in the indirect industrial benefits package because the DND budget often bears most of any associated costs.

However, if one accepts that the fostering of economic development is a secondary objective of defence programs, it is not unreasonable to expect that DND expenditures should be used, from time to time, in support of the government's industrial/regional development goals. Also, restricting indirect industrial benefit activities to the defence industrial base could preclude attractive commercial opportunities and would produce very difficult policy trade-offs.

The resolution to the issue of industrial benefits priorities appears to lie in the distinction drawn at the outset between general defence industry support activities and those actions directed at establishing strategically



essential capabilities. In the case of the latter, it is logical that priority should be given to satisfying such requirements as part of the procurement where they are related to the project. It would, however, appear unduly restrictive to limit indirect benefits to defence applications, since evidence suggests that particularly attractive commercial opportunities could be forgone as a result.

#### **Limiting Factors in the Development of the Defence Industrial Base:**

In considering procurement as a lever for developing the defence industrial base, it is important to recognize that the scope for such activity is limited by a number of factors, including the following:

a. **Nature of Canadian Industry**

The scope for commercially viable defence-related industrial activities is likely to be limited at any point in time by the requirement that a commercially viable defence project in Canada must often satisfy two markets -- DND and the export market -- and by the fact that the international market in defence goods is highly controlled.

b. **Procurement Leverage**

The scope for achieving, in an efficient manner, highly defined, strategic industrial base requirements through indirect offsets is very limited because of the competitive nature of the mechanism and because industrial benefit considerations do not, as a rule, take preeminence over price and quality considerations in procurements.

#### **CONCLUSION**

The above discussion would suggest the following conclusions:

- a. the principle of pursuing the direct involvement of Canadian industry in military procurements is well established, with the extent of the premium DND is willing to incur being the constraining factor; and

- b. on the question of giving defence-related offsets a priority in defence procurements, it is important to distinguish between general support for defence industries, and the establishment of specific industrial capabilities required for national security. While broad scope exists for giving the latter priority in the industrial benefits' activities surrounding defence procurements, the further restriction of industrial benefits eligibility to defence items would appear unduly constraining. Having said this, it should be noted that there are reasonable grounds for assuming that the size of the strategic defence base ultimately defined by DND may not be large, and that the scope for developing a defence industrial base in Canada through procurement is limited.

## THE PROCUREMENT REVIEW MECHANISM

### PURPOSE

To analyze the effectiveness of the Procurement Review Mechanism (PRM).

### BACKGROUND

The basis of the Procurement Review Mechanism (PRM) is a Treasury Board (TB) decision of February 22, 1979 (TB No. 763091) and January 25, 1980 (TB No. 769186) which establishes areas where procurement should be directed towards achieving certain of the government's national objectives. The PRM is an interdepartmental mechanism formed to promote the socio-economic aspects of large procurement projects. Included are procurements valued in excess of \$2 million, or those judged to have significant socio-economic impact regardless of value. Appendix A includes the sub-objectives, criteria and structure of the PRM.

The study team reviewed documentation and additional viewpoints using the methodology described in Appendix B.

Table 1 lists the number of contracts and volume of PRM procurement from 1980 to 1984.

**TABLE 1**  
**PRM Procurement, Fiscal Years 80/81 to 83/84**

<b>FY</b>	<b>No. of Contracts</b>	<b>Total Value \$million</b>
80/81	190	1,167
81/82	298	2,065
82/83	292	1,971
83/84	302	2,407
<b>TOTAL</b>	1,082	7,610

### ASSESSMENT

This assessment covers the leverage question, the suitability of the PRM sub-objectives, the mechanism and its problems, and the achievements of the PRM.

The study team agreed that government procurement should be used as a lever in the achievement of national objectives because the relative size of government procurements (approximately \$9 billion a year) is in many cases, an important market force through which socio-economic benefits (SEBs) can be achieved.

However, a lack of consensus existed on which SEBs should be given priority; which government department should be deciding the priority; who is responsible for ensuring delivery; what is actually achievable; what extra costs are incurred and by whom; what cost premiums are acceptable; and what benefits are achieved when, why, where, how and by whom?

PRM Sub-objectives: There was also agreement that PRM sub-objectives could be achieved to varying degrees especially in larger procurement projects. Leverage was found to be greatest in areas where an individual company does the majority of its business with the federal government; where government procurement represents a large market share for a particular industry; where there is strong competition for a particular procurement; or where the government is involved in developing a market for a new product or industry.

The sub-objectives of the PRM however, should never undermine the fundamental concept of value for money on procurement and should never foster non-viable enterprises.

The major impediments to achieving PRM sub-objectives are as follows:

- the multiplicity of objectives and their undefined priorities;
- the inefficiency of universal application of the related PRM criteria to all procurement cases between \$2 million and \$100 million. It is unrealistic to use the procurement lever in all cases and it is inappropriate to try to get too much out of the lever, especially if attempted late in the procurement process.

Conclusion: Regular re-examination of the PRM sub-objectives is necessary to set and adjust their priorities and to focus the PRM criteria on more specific sectors (industry, technology, etc.), and threshold dollar values (other than \$2 to \$100 million) at an earlier point in the procurement process.



Mechanism: The study team found that the PRM contained in Chapter 305 of the TB Administrative Policy Manual was initially implemented as intended. However, the interdepartmental Procurement Policy Advisory Committee (PPAC), chaired by the Treasury Board and particularly its subcommittee, the Procurement Identification Committee (PIC) functioned only during the early stages (i.e., 1979-1982). On the other hand, interdepartmental Procurement Review Committees (PRC), chaired by the Department of Supply and Services, have been in continuous operation.

More specifically, the PPAC did not establish SEB goals or criteria for project selection beyond those contained in Chapter 305. It did not update operating guidelines for its subcommittees, find a suitable method of including government construction projects and Crown corporation procurements within the PRM or devise a means for the PIC, as a subcommittee of PPAC, to function effectively. However, the PPAC has monitored and controlled the PRM to a limited extent through the review of the annual PRC reports, and partly through interlocking membership on the PRCs.

Nevertheless, in the absence of PPAC directives, individual department initiatives, such as the DSS sponsored Annual Procurement Plan and Strategy (APPS), have attempted to fill the policy vacuum. The attendant problems have produced a sense of confusion over intentions and priorities for both the industry and operating departments.

Problems of PPAC: The PPAC found difficulty in three areas:

- Attempts to further develop PRM policy encountered specific roadblocks. For example, attempts to devise strategies to include construction projects within the PRM were opposed by the Canadian Construction Association. Attempts to marshall Crown corporations procurements under the PRM involved questions about whether government should impose SEB policy on the large Schedule D Crown corporations who are expected to operate essentially under private sector market force conditions.
- During the last three years, both the Department of Regional Industrial Expansion (DRIE) and the Ministry of State for Science and Technology (MOSST) have undergone extensive reorganizations which have reduced initiatives upon which PPAC was dependent to define PRM sub-objectives and priorities.

- It is possible that the Treasury Board Secretariat (TBS) was the wrong place to locate the PPAC chairmanship and secretary. It is difficult for the TB President to sponsor the TB submissions from PPAC in that he does not have a mandate to promote industrial, technological, and social development; develop procurement and sourcing strategies; or override programs of operating departments. Also, there is some question as to whether TB is the appropriate Cabinet Committee to be considering what are essentially long-range capital acquisition plans and strategies.

Conclusion: It is necessary to revitalize the current procurement review mechanism to ensure the efficient capturing of long-range capital equipment acquisition information, development of procurement policy and preparation of options for the use of procurement to achieve national objectives for an appropriate Cabinet committee.

Problems of PIC: The PIC was charged with reviewing program and capital budget forecasts to ensure that all procurement opportunities had been identified by operating departments. The members, after a few meetings in 1979-80 prepared a report which concluded that the existing information on procurement forecasting, including program forecasts and quarterly capital budget reports, was not suitable for the forecasting or identification of opportunities for SEB initiation. However, this was at the time when the Policy and Expenditure Management (PEM) system was just being introduced in operating departments.

The study team believes that in the ensuing five years, long-range capital equipment acquisition planning has improved. For example, the Department of National Defence (DND) now operates a Defence Program Management System which can provide details of planned equipment acquisitions on a 15-year rolling time frame. Transport Canada (TC) has prepared extensive acquisition and replacement plans in both the Air Administration (i.e., the Canadian Airspace Systems Plan (CASP)) and the Marine Administration (i.e., the Coast Guard Ship and Aircraft Replacement Plans). Smaller departments, given certain political direction, have indicated that they could extend their current five-year capital acquisition plans, which are based on the Multi-Year Operational Plan (MYOP) and strategic memorandum.

Conclusion: The current procurement review mechanism needs to be revitalized as follows:

- Operating departments receive political direction on their long-range (8-12 years) roles and objectives and a financial reference level for planning purposes together with any other constraints.
- With inputs from policy departments and industry, operating departments prepare long-range capital equipment acquisition plans which subsequently receive political acknowledgement for planning purposes.
- This information is passed to an interdepartmental coordinating group who then are in a position to develop for Cabinet consideration strategic options for the use of procurement as a lever. The resultant strategic framework would then be used as a common guide. Departments will be able to operate more effectively knowing that, notwithstanding changes arising from more short-term political imperatives as well as unexpected market opportunities, the procurement policies, processes and programs are in concert.

Achievement of the PRM: The study team found that it is difficult to quantify and compare the costs versus SEB achievements of the PRM over the last five years. The lack of validation on a case-by-case basis makes it extremely difficult to determine the extent to which the overall objectives of the PRM have been accomplished. Also, it is extremely difficult to clearly establish that specific benefits were in fact incremental and caused by a specific action of the PRM. Three studies of this controversial area are outlined in Appendix C.

Conclusions of Studies: The PRM achievements, while not substantial in terms of industrial benefits, have produced sufficient other benefits to warrant keeping the mechanism. The PRM would benefit from better long-range planning of procurement strategies and objectives. The Procurement Review Committee (PRC) method of operation should continue.

The study team believes that government procurement should continue to be used as a lever to achieve national objectives. It is appropriate in those cases where some leverage can be realistically expected, and as long as the primary objective of the procurement is not compromised.



To optimize the use of the procurement lever in the \$2 million to \$100 million range, the government should consider taking three steps:

1. Re-examine the national objectives and the associated PRM sub-objectives to ensure clarity and proper priorities.
2. Tailor the related PRM criteria to focus only on those sectors and threshold dollar values which hold the greatest potential for the use of the procurement lever and exempt the remaining procurements from Procurement Review Committee consideration.
3. Organize the early gathering of operating departments' capital acquisition plans, and related policy departments' goals and objectives in order to identify strategic options for using all levels of procurement as a lever, where practicable. Find a better mechanism to do this identification and to coordinate subsequent activity.

The need for a revitalized coordinating mechanism to improve the planning of long-range procurement strategies, in order to optimize the use of procurement as a lever to achieve national objectives, is a common theme in this section of the study team's report.

Conclusion: There exists a larger question related to the machinery of government, which is dealt with later.

## **OPTIONS**

See options described in the paper on "Implementing Long-Range Strategic Plans", which follows.



## APPENDIX A

### HISTORY AND DESCRIPTION OF THE PROCUREMENT REVIEW MECHANISM

The Cabinet decision of RD 254-78 of June 5, 1978 established the following areas where procurement should be directed toward achieving the government's national objectives in:

- a. development or maintenance of Canadian industrial and technological capacity, regional and small business development, achievement of better competitions and strengthening of the Canadian industrial base;
- b. procurement of products from enterprises whose production capacity is being used to defray social costs (e.g. penitentiary industries) and/or to assist socially disadvantaged people to become productive workers (e.g. handicapped people);
- c. instances where the federal government chooses to influence product design or modification in accordance with its environmental, industrial or energy conservation objectives; and
- d. situations where government contracts include terms and conditions consistent with legislation and regulations (e.g. anti-discrimination or fair wages).

In response to this Cabinet decision, the Treasury Board (TB) Ministers, in TB No. 763091 of February 22, 1979 and TB No. 769186 of January 25, 1980, in order to ensure that opportunities for using procurement in support of national objectives were not overlooked, established an interdepartmental mechanism called the Procurement Review Mechanism (PRM).

#### a. Objective

To obtain lasting benefits from the federal procurement activity beyond the immediate impact of the procurement expenditure itself, toward the economic or social development of Canada.

Sub-objectives are:

- to concentrate initially on industrial benefits, particularly on the electronic and other high technology sectors;

- to foster those initiatives that would be competitive in world markets or on the domestic market with normal levels of protection;
- to stimulate new product innovation and improvements in production technology; and
- to provide improved opportunity for sub-contracting to Canadian suppliers, particularly small businesses and suppliers in regions of high unemployment.

## **b. Criteria**

The criteria governing whether a procurement will be selected to provide a specific benefit are as follows:

- the value of the procurement will be in excess of \$2 million for goods and services, or of any value where the socio-economic impact is judged to be significant;
- the procurement action is consistent with Canada's obligation under international agreements such as the General Agreement on Tariffs and Trade and the Defence Production Sharing Arrangement;
- the procurement will not be used as a subsidy to support an otherwise unprofitable activity; and
- when there are extra costs involved in order to achieve a specific benefit it must be demonstrated that:
  - the activity generated by the procurement has a clear prospect of becoming commercially viable;
  - the socio-economic benefits (SEBs) are sufficient to justify the extra cost of the procurement; and either the SEBs would not be forthcoming in the absence of government assistance; or the procurement will contribute to the exploitation of a strategic opportunity.

## **c. Structure**

- The mechanism is a two-tier system consisting of a Procurement Policy Advisory Committee (PPAC) chaired by the Treasury Board Secretariat (TBS) to guide the mechanism at the policy and planning

level and ad hoc Procurement Review Committees (PRCs) chaired by the appropriate contracting authority (usually DSS), to determine, case by case, the most appropriate course of action for a particular major procurement.

- In addition to providing policy and planning level guidance to the mechanism, the PPAC establishes SEB objectives, determines the means by which objectives are to be met and advises deputy heads of operating departments of procurements which require special review. Membership is drawn from Treasury Board Secretariat (chair), Department of Employment and Immigration, Department of Finance, Department of Regional Industrial Expansion, Department of National Defence, Department of Public Works, Ministry of State for Science and Technology, Department of Supply and Services, and Ministry of Transport.
- The PRCs are tasked with the development of appropriate strategies to exploit the potential for maximizing SEB objectives in selected procurement projects in the \$2 million to \$100 million range. The members of the committee include the relevant contracting authority (chair), user department(s), DRIE, MOSST, Finance and Employment and Immigration (at their option) plus other government departments as the situation demands.
- The system is completed by a subcommittee of PPAC called the Procurement Identification Committee (PIC), which is charged with reviewing program and capital budget forecasts at least once a year to ensure that all procurement opportunities are identified by operating departments and that opportunities for the aggregation of procurements are not overlooked.
- Industry participation on the PPAC and PRCs may be invited as appropriate, provided no conflict of interest arises. Industry representatives, however, do not participate in final committee considerations and decisions.

**Note** - For procurement projects over the value of \$100 million, or deemed to have special impact, a separate major Crown project (MCP) management system is in effect which operates in parallel but outside of the PRM.

STUDY TEAM METHODOLOGY

Shortly after its creation, the Study Team on Government Procurement discovered that the Treasury Board Secretariat was leading an interdepartmental team which was in the process of examining the Procurement Review Mechanism. The team objective was to determine whether the PRM as presently designed and operated is as effective and efficient as it could be or whether a different mechanism would be more effective or efficient for obtaining the greatest possible SEBs from government procurement in the \$2 million to \$100 million range, and to recommend changes that would rectify deficiencies or provide improvements.

A cooperative arrangement was worked out whereby the study team and the TBS evaluation team, both supported as required by consultant work, would jointly conduct:

- interviews with selected government officials of key departments involved in the PRM;
- interviews with a selected number of industry associations to determine their attitudes toward the PRM; and
- through case studies, a comparison of the analysis and recommendations of the PRC with the actual results obtained.

The results of the joint evaluations are contained in separately produced team reports including this one.

The study team referred to the following documentation in assessing issues arising from the examination of the PRM:

- TBS PRM files;
- PPAC and PIC minutes of meetings;
- DRIE review of industrial benefits claimed from PRM;
- Cross Report on a Review of IB Policy and Implementation for Major Crown Procurements;
- Annual Reports of the Procurement Review Committee;
- Source Development Fund Program Evaluation (DRIE & DSS of Oct. 31, 1984);
- Evaluation Report on the PRM by C.E. Napier Consultants of April 1985; and
- Study Team interview reports.



### THREE STUDIES ON PRM ACHIEVEMENTS

#### DRIE Review of IBs Claimed for PRM (Dec. 1984)

1. The focus of this study was on Industrial Benefits (IBs) only and not other socio-economic benefits (SEBs).
2. The basis of the study was in terms of cost savings, Canadian content and IBs. The annual reports of the PRC for March 1979 to September 1983 include summary information on IBs anticipated and achieved for a number of projects submitted to the PRM during that period. Of the 418 PRC cases reviewed (valued at \$7.6 billion) the PRC reports projected IBs of \$432.1 million to be achieved as a result of PRC initiatives.
3. The review led to the findings that for the ten major cases reviewed, anticipated IBs of \$340 million or 78 per cent of all anticipated benefits clearly came about in the main through other direct means (e.g. earlier contract action or other government initiatives) or that these claims can be legitimately questioned as to their validity within the definition of an IB. The conclusion is that the anticipated IBs did not arise from PRC initiatives and are not a valid basis for supporting the PRM as a direct contributor to the generation of IBs.
4. It was also concluded that IBs obtained through procurements sourced outside Canada through PRC considered cases were not significant, and that they should be eliminated as an SEB objective (except in unusual circumstances).
5. Nevertheless, outside the relatively narrow IB focus of the DRIE review, the study team found that the PRC achieved other important benefits including:
  - on a selective basis, fostering competitive rather than non-competitive sourcing;

- encouraging the establishment of new Canadian sources of supply for products and services;
  - supporting initiatives for Canadian companies to be competitive on the world markets;
  - providing for sub-contracting for small Canadian suppliers; and
  - selecting various sourcing actions including: directing contracts to particular suppliers, sole sourcing, narrowing the sources of supply to be considered, arranging set-asides, etc.
6. Therefore, the PRCs can and do provide a useful mechanism to achieve certain SEBs, although care must be taken to focus the PRM objectives on high payoff areas.

#### **C.E. Napier Consultant Report (May 1985)**

1. Sixty PRC cases were selected for analysis. Thirty-nine were from the period 1979-80 to 1982-83 of which 27 were highlighted as cases with anticipated high payoff in terms of SEBs. (These same 27 cases were also part of the DRIE review.) Twenty-one cases were from the period 1983-84 to 1984-85 of which 11 were highlighted as potentially having high SEB payoffs.
2. The consultant report concluded that results have been below expectation; there has not been enough lead time available to the PRC to allow action to be taken to generate SEBs. Benefits have thus tended to be of a short-term nature rather than long-term where new technology is developed or new sources of supply are generated. Benefits are difficult to measure because of the causation and incrementality factors and the lack of a feedback system with which SEB achievements can be tracked.
3. It is, therefore, necessary to improve long-range procurement planning at the operating department level to enable the PRM to work more effectively. Also, more selectivity in applying the PRM criteria to procurement cases is necessary. Finally, provided that the costs are not too high, some form of SEB feedback system would be helpful.

**Study Team Assessment of the Procurement Review  
Committee (PRC) Case Load (May 1985)**

1. The total PRC case load is as follows:

79-80	-	42
80-81	-	139
81-82	-	114
82-83	-	123
83-84	-	169
84-85	-	<u>109</u> (to May 6, 1985)

**TOTAL**            696

2. Additional factors:

- average length of meeting plus travel and preparation time is estimated to be 3 hours (Secretarial clearances take considerably shorter time periods than actual meetings, hence the low estimate);
- average number of participants is 12;
- estimated expenditure of effort for PRC is  $12 \times 3 \times 696 = 25056$  person-hours;
- therefore, the estimated expenditure of person-years for the PRC is as follows:

-  $\frac{25056 \text{ person-hours}}{1500} = 16 \text{ PYs}$

- 2 person PRC Secretariat x 6 years = 12 PYs

**TOTAL**                            28 PYs

3. The study team does not consider 28 person-years of direct effort on PRCs over a 6-year period to be extravagant.
4. Approximately 5 per cent of PRC meetings (30-35) involved direct industry participation. Therefore, the original intent of engaging industry in the procurement planning process through the PRM has not been very successful. The reason most often given is that PRC deliberations are held too late in the procurement process to warrant industry participation. The alternatives are to:

- continue to rely on policy department and common service agency interpretation of industry's likely inputs;
  - advance PRC deliberations in the acquisition planning process;
  - involve industry earlier in the acquisition planning process (i.e. through earlier consultation at the operating department level); or
  - all of the above.
5. About 31 of the 696 PRC cases to date involved omnibus PRC deliberations which were usually multi-year contracts with Canadian sources in the commodity and service sectors. These cases are unlikely to involve the planning of any additional SEBs. Therefore, routine, omnibus procurement cases should be excluded from the PRM criteria.
  6. Approximately 10 per cent of the PRC cases were deemed to be subject to the provision of GATT. These cases are not legitimately open for SEB action given our international treaty commitments. Therefore, procurements subject to the provision of GATT should be excluded from the PRM criteria.
  7. The study team found that the PRC process also resulted in other positive benefits including:
    - improved interdepartmental communication and cooperation;
    - improved management knowledge of the procurement process;
    - improved identification of SEB opportunities, albeit very late in the procurement process;
    - a forum for interdepartmental conflict identification and resolution;
    - sensitization of departments to PRM objectives and to other departments' concerns in this general area; and
    - the focus of departmental operating decisions so as to be responsive to SEB considerations.
  8. Therefore, although expectations were that more SEBs would be achieved through the PRM, it is as evident that for a reasonable expenditure of



effort, the PRC activity has produced some positive results. Improvements to the PRM are needed but, the principles behind it are sound and the resultant public policy and process should be continued.

## **TOWARD A STRONGER PROCUREMENT LEVER: PREPOSITIONING CANADIAN-BASED INDUSTRY**

### **PURPOSE**

To discuss the impediments to stimulating industrial development by using the procurement lever for achieving Industrial Benefits (IB) through major Crown projects, and to recommend strategies for addressing the identified issues.

### **BACKGROUND**

Real gains in the use of the procurement lever can only be achieved by sharp focus on opportunities for long-term industrial development. The objective is to stimulate international competitiveness of Canadian-based industry. A shift in direction is required away from almost total reliance on "off-the-shelf" procurement from foreign suppliers. What is required, then, is a federal policy that creates a favorable climate for, or prepositions, Canadian-based industry and foreign industry that is prepared to invest in Canada or enter into joint ventures in Canada, to compete for major government procurements wherever possible on the basis of combined domestic and export market potential or long-term life cycle support of major equipment.

Canadian industry cannot develop systems and equipment to meet all government requirements for capital equipment. However, Canadian industry does have specialized capabilities of world class standard in many technological areas. This expertise can be applied to Canadian requirements and be internationally competitive - if given the opportunity. For the more than 33 new major Crown projects likely to be approved over the next ten years at a value of over \$27 billion, there appear to be many opportunities for increased Canadian industry participation. There are encouraging signs that government departments are taking steps within the limits of current policy, planning and administrative constraints, to work more closely with industry. These initiatives should be promoted by changes in policies and procedures to enhance Canadian industrial competitiveness through prepositioning for government procurement.

## ASSESSMENT

The study team has identified a number of critical roadblocks to improve industrial development through use of the procurement lever. These issues and the strategies for dealing with them are the subject of this paper.

The issues standing in the way of enhancing industrial development through the procurement lever are:

- limited negotiating leverage that can be applied to major foreign contractors;
- lack of advance notice of procurements to Canadian industry;
- inadequate long-range capital acquisition planning by government;
- lack of consultation with industry to accommodate business planning in government procurement strategies;
- lack of coordination of procurement policy and practice with industrial/regional development policy and programs.

A critical set of conditions must be in place before a foreign company will make a business decision resulting in major new upgraded Canadian industrial capability which can compete internationally. Those conditions will not always be present when Canada makes its major procurements, as shown by the CF-18 and Long-Range Patrol Aircraft (LRPA) programs. However, world product mandates which eventually led to major export sales did result from earlier procurements from Garrett Manufacturing Limited and Litton Systems Limited, and more recently Raytheon Canada through its participation in the Radar Modernization Project (RAMP). In these cases, the fortunate congruence of interests of the U.S. parent companies, their Canadian subsidiaries and the Canadian government, enabled industrial developments very favourable to Canada to occur. There may be other opportunities for foreign investment, joint ventures or world product mandates. But, rather than relying on fortunate congruencies, foreign firms may be attracted to investments in Canada when they have been given sufficient lead time to plan and it is worth their while. While the emphasis of our approach is to focus on the opportunities for Canadian industry, where the industrial infrastructure does not exist or is not feasible to create in response to a major procurement, benefits can equally be

attained from foreign sources by following the same strategy that is outlined below.

It is the constant search for and exploitation of the mutual interests of government and Canadian-based industry, both domestically and foreign-owned, that is the key to industrial benefits of lasting value. This can only be accomplished through anticipation and actions taken years in advance of major procurement commitments: in other words, prepositioning Canadian industry.

Industry needs years to prepare for major procurement opportunities, and it needs information. The Canadian government's approach to capital equipment acquisition severely frustrates those needs. Design and development of complex high technology systems or subsystems typically require five to eight years if the base technology is in place at the outset. Incorporation of a major new technology concept, such as the microprocessor, into a production weapons system or non-military electronics system can take as long as 20 years. (Note: several major Canadian-owned companies currently have important new technologies in this category.)

In contrast, the Policy and Expenditure Management System (PEMS) and the Multi-Year Operational Plan (MYOP), which are the government's principal financial planning tools, look ahead only three years. Furthermore, when government buys strictly "off-the-shelf", it usually does not enter into contractual relationships with industry until the project definition phase, which seldom comes more than two years ahead of a major procurement commitment. By then, there is no chance for a Canadian company, whether Canadian controlled or a subsidiary of a multinational corporation or a foreign company investing in Canada, to develop products or to acquire technology for that procurement.

The relationship in timing between the government's capital equipment acquisition cycle and industry's product/subsystem investment and development cycle is illustrated in Figure 1. The chart shows very clearly that industry must work parallel to government from the outset of the acquisition cycle.

Conclusion: A necessary condition for prepositioning Canadian industry is that government must provide industry with advance notice of procurement at the earliest stages of project planning. There already are pockets of activity



within government where this does occur and where industry has been able to respond successfully. These include the SHINMACS, SHINPADS, SHINCOM and CANTASS electronic subsystems for the Canadian Patrol Frigate. But unfortunately, the practice is not widespread.

Adjustment to the process of long-range capital acquisition planning by the government is a necessary prerequisite in providing adequate early warning to industry. Until very recently, none of the larger government departments had adequate long-range capital plans to reveal to industry, even on an individual project basis. Furthermore, since there has been no political endorsement sought or given for capital plans beyond the three-year horizon noted above, departments such as Department of National Defence (DND) and Transport Canada (TC) have been extremely reluctant to discuss their planning with industry until late in the acquisition cycle. But if industry doesn't know what the government intends to buy, it cannot prepare itself.

Within the past several years, much has been accomplished in DND and TC, in particular, in the development of realistic 10 to 15-year capital equipment plans relating to assumed missions and capital budget levels. The Canadian Airspace Systems Plan of TC has been made public and is a useful top level document for industry planning. DND has developed a ten-year Capital Equipment Plan which has had limited distribution to other government departments. The information contained in the plan is not generally available to industry.

There is a need to modify the long-range capital planning process of government to:

- provide a level of political endorsement which will facilitate industry and government planning, consultation and investment;
- identify projects with industrial development potential very early;
- identify opportunities for consolidation of procurements or development of specific sector strategies with industrial development potential (see Appendix A for examples);
- provide the basis for coordinated R&D planning and consultation with industry.

The issue of long-range capital equipment planning is complex but fundamental to prepositioning industry. The mechanisms which government can use to improve performance in this area are the subject of the following issue paper.

Advance notice of procurements is necessary but not sufficient for stimulating industrial development through the procurement lever. Early consultation with industry is essential if the potential benefits of linking Canadian procurements and related investment decisions of industry with export market opportunities are to be realized. The business planning of industry can and does lead to industry teaming and joint venture arrangements among Canadian and foreign companies. It also leads to dialogue between industry and government regarding public and private sector investment sharing in product development and establishing Canadian sources for addressing both domestic and export markets.

Business arrangements beneficial to Canada can be undertaken with Canadian-owned companies, multinational enterprises with established operations in Canada, and foreign companies prepared to establish a presence in Canada.

Decision-making for projects of high technical and international marketing complexity is extremely difficult for both government and industry. The need for early consultation is widely supported by industry and gaining support within government departments.

A variety of consultative mechanisms are required to ensure adequate notification of industry and accommodation of business planning in procurement strategies. A number of these mechanisms, all of which contribute to the dialogue, are either already in place or are being considered by departments:

- Industry - DRIE: A Memorandum of Agreement was signed May 29, 1985 between the Minister of Regional Industrial Expansion and the Air Industries Association of Canada to examine together industry-wide issues of competitiveness, productivity, small business and data and forecasting related to technologies and markets.
- Industry - Operating Departments: The Department of Communications has established a Communications Research Advisory Board to advise its senior

management on the impact of advances in science and technology on departmental missions, policies and programs. Other departments including DND and MOT could benefit by adopting similar mechanisms. In addition, department/industry working groups are in place or planned by departments, including DND, DOC and EMR to address specific detailed technology issues.

- Industry - DSS: The Department of Supply and Services plans Procurement Outlook Conferences across Canada to provide advance notice of procurements to industry. In addition, DSS undertakes extensive consultations in preparation of its Annual Procurement Plan and Strategy. Both initiatives could be more useful if undertaken within the framework of improved long-range planning of government procurement as recommended by the study team.
- Company - DRIE: DRIE has negotiated Memoranda of Understanding (MOU) with a number of companies covering medium term (typically five-year) relationships. The agreements cover financial support and information exchange in relation to the companies' overall business plans. The company MOU may eventually include future project specific agreements relating directly to a company's perceived markets independent of Canadian government procurement. Alternatively, project agreements with individual companies or consortia/joint venture teams of companies may relate to a specific government procurement opportunity. Such agreements will be made on a case-by-case basis as a result of opportunities identified by the interdepartmental central coordinating group proposed in the following issue paper.

These and other consultative initiatives, although positive, are uncoordinated and incomplete. There is scope for improvement, and consultative mechanisms should be systematically reviewed.

R&D Support: Adequate R&D support to industry is necessary for prepositioning. Two key deficiencies now exist in this respect. The first is that there is a gap in R&D support provided by government during the product development cycle. Typically, operating departments have R&D funds which can be contracted to industry to cover the



early feasibility and demonstration phases of development. Operating departments' capital equipment budgets cover the procurement of production systems or equipment. Funding to cover the expensive engineering model or preproduction phases of development generally is not available from operating departments such as DND or TC. The private sector usually is unable to provide funding for this phase from its own resources. And operating departments resist such expenditures because they are not justified solely on the size of the domestic market.

In the past, the Defence Industry Productivity (DIP) Program administered by DRIE has been used to support development by industry of products aimed at export markets. To date, it has not been available to support product development aimed initially at the domestic market. Since R&D support for developing industrial production capabilities will not normally be a legitimate function of the operating department's budget, consideration should be given to funding from other sources such as a modified DIP Program for cases where a large enough domestic or combined domestic/export markets can be demonstrated.

The second R&D related problem is the level of funding available to Canadian industry compared to the level that U.S. industry receives from the U.S. government. Figures provided by the Air Industries Association of Canada show that the U.S. government covers 65 per cent of aerospace R&D costs of U.S. industry, while the comparable figure in Canada is 38 per cent. Total R&D funding as a percentage of sales is 29 per cent in the U.S., compared with 13 per cent in Canada. The problem of Canadian industry is exacerbated by different government/industry share ratios in different regions of Canada. The bulk of Canadian aerospace, defence and electronics industries are located in Ontario and Quebec which have the lowest share ratios.

The issue of increased levels of R&D funding must be given careful consideration if Canadian industry is to remain competitive.

DRIE's primary thrust in relation to the aerospace, defence and electronic sectors is in developing the export potential of Canadian industry. The basis of this strategy is that it provides the greatest return for Canada on the government's investment. Long-term investments will have the greatest payback in cases where the focus is on building international competitiveness. IB programming for past and



current major Crown projects has not been clearly focused on such a strategy.

Specific measures to be taken to align procurement policies and practices with other industrial development policies are:

- endorsement by Ministers of long-term industrial/regional development as the primary industrial benefits objective to be pursued through the leverage of public procurement activity;
- focusing of such industrial development programming on activities which strengthen international competitiveness;
- modifying the DIP program to allow funding for developments, initially aimed at domestic defence and defence-related markets where justified on the basis of total world markets, notwithstanding current budgetary constraints on increased support for R&D; and
- improving interdepartmental coordination among operating departments, DRIE and other possible funding sources to make better use of these sources to complement project funding by operating departments.

## **OPTIONS**

See options described in the paper on "Implementing Long-Range Strategic Plans", which follows.

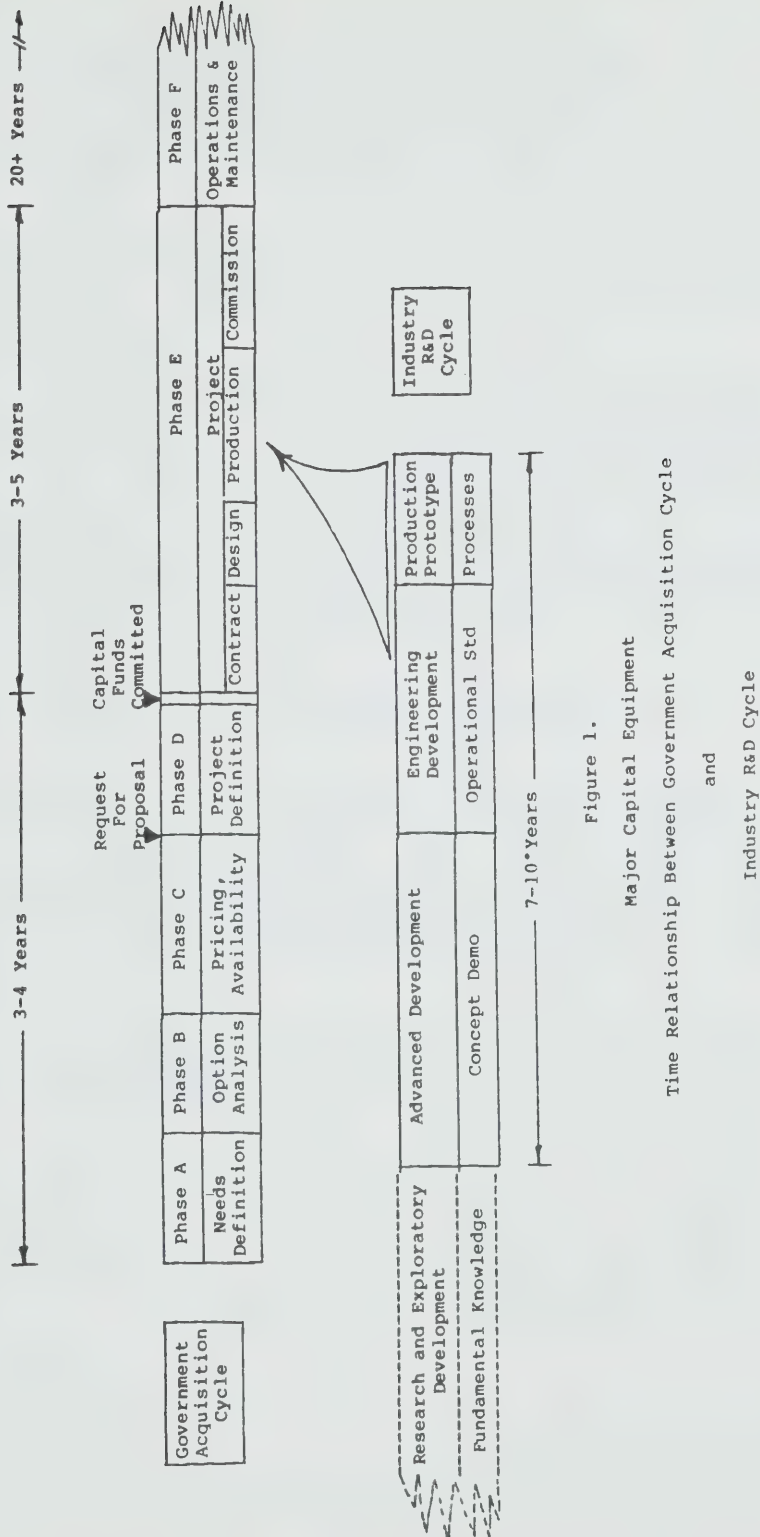


Figure 1.

Major Capital Equipment

Time Relationship Between Government Acquisition Cycle

and

Industry R&D Cycle

**EXAMPLES OF GROUPS OF FUTURE  
MAJOR CROWN PROJECTS FOR  
STRATEGIC PROCUREMENT REVIEW**

**SHIP PROJECTS**

The following ship acquisitions/replacements have been identified for the next 10 to 15 years:

**DND:**

SRP II (Frigate replacement)  
SRP III (Frigate replacement)  
AOR Replacement (Supply ship replacement)  
CASAP (Submarine replacement)  
Minor vessel replacement  
TRUMP (DDH 280 Destroyer Update and Modernization)

**Transport Canada**

Fleet Capital Investment Plan II  
Polar 8 (Ice breaker acquisition)

In addition, DND, TC, and Fisheries and Oceans have planned extensive repair and overhaul projects for their respective fleets which will run into hundreds of millions of dollars over the next 10 to 15 years. An early analysis of these potential procurements may result in options concerning:

- rationalization of supporting industries;
- involvement in international consortia;
- development of sourcing strategies related to life-cycle support;
- focusing on industrial benefit priorities, etc.

**SPACE PROJECTS**

The following space-related projects have been identified for the next 10 to 15 years:

**DND:**

Space-Based Radar  
EHF Satellite Communication  
North Warning (Communications part only)

**DOC:**

Mobile Satellite Communication

**MOSST:**

Space Station

**EMR:**

Radar Sensing Satellite

An early analysis of these potential procurements may result in options concerning:

- involvement in joint ventures;
- transfer of technology;
- development of new products at the subsystem level;
- enhancement of international competitiveness in areas of high technology spin-offs; and
- focusing of R&D efforts, etc.

**ARMY TRACKED AND WHEELED VEHICLE PROJECTS**

The following Army tracked and wheeled vehicle projects have been identified for the next 10 to 15 years:

- heavy truck replacement;
- 5/4 ton truck replacement;
- northern terrain vehicle acquisition;
- combat infantry vehicle replacement; and
- tank replacement.

An early analysis of these potential procurements may result in options concerning:

- sourcing of military truck production;
- development of life-cycle support;
- involvement in NATO standardization projects; and
- balancing of Defence Production Sharing Arrangements.



## **IMPLEMENTING LONG-RANGE STRATEGIC PLANS**

### **PURPOSE**

To examine ways of improving the government's long-range strategic planning related to the use of procurement to achieve national objectives.

### **BACKGROUND**

The study team has concluded that the following measures are required to use the procurement lever more efficiently to achieve realistically attainable national objectives: earlier identification of potential procurements; better interaction with industry; more coordinated long-range planning of procurement strategies; and better, more coordinated use of research and development (R&D).

Essentially the problem is one of finding ways to improve long-range procurement planning and coordination of individually mandated departmental activities within a strategic framework that has received early, appropriate political endorsement.

### **ASSESSMENT**

Three attempts have been made in the last five years to accomplish some form of planning to optimize the use of procurement to achieve national objectives. None of these attempts has been entirely successful.

The most comprehensive planning process took the form of the Procurement Review Mechanism (PRM) initiated in 1980. PRM is an interdepartmental mechanism to promote the government's socio-economic objectives when making large procurements. This process was not entirely successful, because inadequate long-range capital acquisition planning data and the placing of the decision-making with what was possibly an inappropriate Cabinet Committee.

To a certain extent, the Special Recovery Capital Projects (SRCP) Program, initiated in 1983, was an attempt to change the planning process. In the short term, its primary objective has been to stimulate key sectors of the economy through the improvement or expansion of public facilities, construction of new facilities and the initiation of major government purchases of aircraft,

vessels, equipment and material. The long-term objective of the Program is to develop the basic infrastructure in key economic sectors which will support national goals and objectives.

At this time, all of the lessons learned from this type of planning process are not in. There have been some useful fallouts of the SRCP program related to "fast-track" program approval procedures and delegation of contract approval levels. However, it is evident that SRCP is by its nature, designed to provide short-term stimulation to the economy and not necessarily contribute to more effective long-term development.

There appears to have been some conflict between central program management/monitoring located in a common service agency (DSS) and decentralized accountability for project delivery within lead departments. Special programs such as SRCP place a strain on departmental resources, priorities and planning systems. They would have a better chance of success if they were designed with sufficient flexibility to be incorporated in the context of departmental programs, management philosophy and operating environment.

The third such initiative, the Annual Procurement Plan and Strategy (APPS) sponsored by DSS, was first produced in November 1983, after approval by Cabinet. The 1984-85 version did not go to Cabinet and the 1985-86 version is still in the final stages of coordination. The papers are produced after an extensive consultative effort involving DSS with companies that supply goods and services to the federal government, trade associations, other federal government departments and provincial governments.

The document has two principal objectives:

- to encourage a broader interdepartmental and industry search for new economic and regional development opportunities through the purchase of goods and services; and
- to ensure that these opportunities are brought to the Cabinet's attention in the context of strategic alternatives.

Certainly the strength of these annual documents lies within the broad range of consultations that take place. This important feature produces excellent feedback for

internal use by DSS management. However, the document does not fulfil its other stated objectives. First, by its nature, it strays into areas of policy determination, and thus is viewed as an overly ambitious initiative by a common service agency. Because of this problem of overlapping policy constraints, its contents must be kept unfocused and appear vague. The fact that priorities change each year, even before a change can be effected, compounds the problem. Secondly, the document does not offer any strategic alternatives to Cabinet in the context of the major procurement programs under way or planned.

APPS attempts to fill a vacuum created by the absence of activity by the Procurement Policy Advisory Committee (PPAC). While commendable, it has resulted in DSS involving itself in the development of policy related to industrial and regional development, an area more properly the responsibility of DRIE.

Conclusion: The APPS document should be reoriented by DSS for its own use. However, much of the consultative work that is part of APPS can ensure a valuable contribution by DSS to the strategic planning process as proposed in this report and should be retained.

New Attempt: The study team investigated the hypothesis that a new attempt to improve the use of the procurement lever would be useful.

First, the study team believes that making certain policy and process changes to the Procurement Review Mechanism (PRM) and the Industrial Benefits policy, coupled with more coordinated use of government R&D funding, will result in more achievements.

Second, the government has almost completed its initial review of how it wants departments to operate in the medium term. This, in turn, provides the basis for longer-term strategic and development planning which is essential to the success of strategic procurement-related planning.

Third, the study team has found that the Policy and Expenditure Management System (PEMS), first introduced in 1979-80, has resulted in improved planning mechanisms in operating departments. All departments are now capable of producing capital acquisition plans for the ensuing 3 to 5-year period as required by the Multi-Year Operational Plan (MYOP)/Strategic Memorandum. These plans are better than



before, but they can be improved upon further. Large departments such as DND and TC already have internal capital acquisition plans which extend to the 10 to 15-year time frame. All departments consulted felt an 8 to 12-year Capital Acquisition Plan could be produced for the purposes of strategic procurement planning, given certain political endorsements of departmental objectives, financial reference levels and other planning guidelines.

Finally, the study team is aware that there is a wealth of knowledge, experience and capability present in the Canadian private sector which can and should be brought to bear on providing information and advice to strategic procurement planning at various stages of the process. The type of initiative established by the Task Force on Program Review is new, and it has resulted in a form of consultation between the private and public sectors which can serve as a model for future work.

**Conclusion:** Certain changes in current policies and procedures will improve the use of procurement to achieve national objectives.

**Long-Range Capital Acquisition Planning:** The first requirement is to improve the long-range capital acquisition planning information made available by operating departments. It is believed that this can be done without any increase of resources by providing operating departments with required long-range strategic direction on their individual roles and objectives and financial reference levels for capital equipment planning purposes and any other planning guidelines.

This will enable operating departments to develop their strategic plans (determine its goals); development plans, (deciding what changes are needed to enable the organization to move from where it is to where it wants to be); and operational plans, (deciding how to keep the present operation going including the planning to replace resources as they are consumed or reach the end of their useful life).

From this process, a long-range capital acquisition plan can be developed covering both the PRM (\$2 to \$100 million) and MCP (greater than \$100 million) range of procurements which, after ministerial endorsement, can be provided to a central coordinating group for analysis as related to strategic acquisition planning. It is



appreciated that the details of such a capital acquisition plan will vary in degree of usefulness - the farther out one goes in time the less sure one will be of what is needed.

The plan will need to be reviewed annually, and sufficient flexibility left to operating departments to change the plan as other factors change. Nevertheless, it is believed that sufficient information can be extracted which, when integrated with appropriate policy inputs from interested departments, can and will result in strategic options for Cabinet use.

Conclusion: Operating departments should further develop approved long-range (8 to 12 years) capital acquisition plans (PRM and MCP related) for the purpose of review by an interdepartmental coordinating group charged with identifying strategic options for the use of procurements to achieve national objectives.

Policy Planning: The second requirement is to ensure that policy departments such as EA/Trade, DRIE, MOSST and EIC and common service agencies such as DPW and DSS are in a position to input appropriately to the strategic procurement planning process. This also requires the establishment of long-range goals and objectives as well as the gathering of market intelligence to permit the development of "main chance" strategic options involving the optimum use of the procurement lever. The policy framework already exists and can be used, given appropriate ministerial endorsement.

Conclusion: The appropriate policy departments and common service agencies should further develop approved long-range goals and objectives for the use of an interdepartmental central coordinating group charged with identifying strategic options for the use of procurement to achieve national objectives.

The Proposed Mechanism: It is proposed that a mechanism be established to examine long-range capital acquisition plans prepared by operating departments. The purpose of the mechanism is to identify strategic options for consideration of Cabinet for using procurement in support of national objectives.

The key features of this mechanism are a Cabinet Committee which provides timely direction; an interdepartmental coordinating group that identifies strategic options for the use of the procurement lever from

the full range (MCP and PRM level cases) of planned capital acquisition; and the implementation of politically endorsed strategies by the current PIC/SRB, PRC and common service agencies. (See Appendix A)

The various options as to which Cabinet Committee should be assigned the proposed functions are outlined in Appendix B. Alternatives include the involvement of Priorities and Planning, a subcommittee of Priorities and Planning, Treasury Board or Economic and Regional Development. The study team believes that the Cabinet Committee on Economic and Regional Development is the most appropriate group of Ministers to direct the mechanism because of the emphasis to be placed on the use of procurement to achieve long-term industrial/regional development. However, the coordination of the required Cabinet submissions will be enhanced if co-sponsored by the Ministers of National Defence, Transport, Regional Industrial Expansion and Supply and Services.

The various options as to the composition of the interdepartmental coordinating group are outlined below. However, it is evident that the membership must consist of at least EIC, Finance, DRIE, DND, DPW, MOSST, EA/Trade, DSS, TC and TBS to ensure optimum coordination of activity. The real options involve who provides the chairperson and secretariat. The options are outlined in Appendix C. They include the involvement of PCO, TB Secretariat, a policy department (e.g. DRIE, MOSST, etc.) or an operating department (DND, TC, etc.). The study team believes that the Department of Regional Industrial Expansion is the most appropriate policy department to provide the chairperson and secretariat of the group.

The outline of how this proposed mechanism would fit together is shown below.

FUNCTION	ORGANIZATION	PURPOSE
Decision	Cabinet Committee	Endorsement of long-range strategic procurement-related options
Advice	Interdepartmental Coordinating Group	Strategic planning and monitoring
Direction		
Implement- ation	PROCUREMENTS (NOTE)	Detailed operation of the procurement lever
For Major Crown Projects  (PIC/SRB)	For Procurement Cases Subject to PRM  PRC	ALL OTHER Procurement Cases  Common Service Agency
No change to current system	Change PRM as Recommended in Previous Paper	No change to current system

**Note -**

1. Currently, MCPs are procurements greater than \$100 million; PRM cases are between \$2 million and \$100 million; and all others are less than \$2 million.
2. (PIC/SRB) - Project Implementation Committee/Service Review Board.
3. PRC - Procurement Review Committee.

**Conclusion:** The proposed mechanism will improve the use of procurement to achieve national objectives. A comprehensive implementation plan for review by Task Force Ministers within six months is required. Upon approval, the Treasury Board policy on Procurement Review must be appropriately revised.

**OPTIONS**

The study team recommends to the Task Force that the government consider the following measures:

Establish an interdepartmental coordinating group chaired by DRIE and made up of senior officials from DND, TC, DRIE, MOSST, EIC, EA/International Trade, DPW, DSS, Finance, and the TBS for the purpose of preparing a DND, TC, DRIE, and DSS co-sponsored annual strategic acquisition plan to improve the use of procurement to achieve national objectives. In preparation for the first annual plan, the group will bring forward an implementation plan that should take into account:

1. enhancing the international competitiveness of Canadian industry by establishing long-term industrial and regional development, as the primary national objective for major procurements;
2. reviewing the effectiveness of departmental policies in relation to the use of procurement to achieve national objectives;
3. retaining the method of operation of the Procurement Review Committee (PRC), focusing criteria on specific sectors and dollar thresholds as a minimum and excluding all routine procurement cases and all procurements subject to GATT;
4. improving consultation between industry and government with the objective of:
  - a. notifying industry of procurements early in the acquisition cycle,
  - b. promoting the early exchange of information between industry and government related to project and investment opportunities,
  - c. improving information exchange between industry and operating departments on technology issues;
5. a strategy to improve R&D support to assist Canadian firms in prepositioning themselves to bid on major federal projects which includes consideration of:
  - a. how such support would be coordinated with operating departments,
  - b. possible reallocation of R&D funding to enable Canadian industry to compete better with its foreign competitors in government procurements;



6. long-range (8 to 12 years) capital acquisition plans, initially from DND and TC covering procurements over \$2 million in the form required by the interdepartmental coordinating group.

Given that the plan identified in the first paragraph of Options would receive annual Cabinet consideration, it would no longer be necessary to submit the Annual Procurement Plan and Strategy (APPS) to Cabinet.

Revise the Administrative Policy Manual in accordance with the first paragraph of Options.

## **APPENDIX A**

### **INTENDED FUNCTIONS OF EACH ELEMENT OF THE REVITALIZED PROCUREMENT REVIEW MECHANISM**

#### **Cabinet Committee**

- To adjust as required the priorities for the use of procurement as a lever to achieve national objectives;
- to endorse strategic options for the use of procurement as a lever; and
- to direct departments as required.

#### **Interdepartmental Central Coordinating Group**

- To integrate policy departments' long-range goals and objectives with the approved national objectives within any stated priorities;
- to identify from operating departments' 10 to 15-year long-range capital acquisition plans, which cover both the PRM (\$2 million to \$100 million) and MCP (greater than \$100 million) range of cases, any strategic options for the effective use of procurement as a lever to achieve national objectives;
- to seek Cabinet Committee endorsement of any strategic options for the use of procurement as a lever;
- to regularly advise departments about strategic options and the means by which certain objectives can be met; and
- to coordinate the necessary interdepartmental activities to develop through time, endorsed long-range strategic options.

#### **Procurement Identification Committee/Senior Review Board**

No change is needed to the current system as detailed in Treasury Board Administrative Policy Manual, Chapter 140.

#### **Procurement Review Committee**

The current system should be changed as recommended in Section 5, The Procurement Review Mechanism.

#### **Common Service Agencies**

No change is needed to the current system.

**CABINET COMMITTEE OPTIONS**

**Priorities and Planning**

Advantage

- Full coordinating power

Disadvantage

- Too busy

**Specially Designed Subcommittee of Priorities and Plans**

Advantage

- Tailored to include appropriate Ministers
- Necessary coordinating power

Disadvantage

- Still too busy
- Requires special arrangements

**Treasury Board**

Advantage

- Some regular involvement in the issues

Disadvantage

- Insufficient coordinating power
- Did not function in Procurement Review Mechanism as proposed in the past

**Economic and Regional Development**

Advantage

- Some regular involvement in the issues

Disadvantage

- Lead department Ministers (e.g. DND) not regular members.

**INTERDEPARTMENTAL CENTRAL COORDINATING GROUP OPTIONS**

**WHICH DEPARTMENT PROVIDES THE CHAIRPERSON AND SECRETARIAT?**

**Privy Council Office**

Advantage

- Full coordinating power

Disadvantage

- Not normal function

**Treasury Board Secretariat**

Advantage

- Some coordinating power

Disadvantage

- Did not function in PRM as proposed in the past

**Operating Departments (e.g. DND, TC)**

Advantage

- Concerns of the lead department accountable for program delivery fully considered
- Access to departmental appropriations

Disadvantage

- Limited coordinating power

**Policy Departments (e.g. DRIE, MOSST)**

Advantage

- Concerns of policy department fully considered

Disadvantage

- Limited coordinating power
- No access to relevant appropriations



## **CROWN CORPORATION PROCUREMENT**

### **PURPOSE**

To review the extent to which procurement policies and practices in Crown corporations are supportive of government industrial and regional development objectives, and to assess whether further comprehensive study of this topic should be undertaken.

### **BACKGROUND**

The Financial Administration Act lists 147 wholly owned Crown corporations, which are estimated to purchase about \$9 billion in goods and services annually for their own use.

This procurement expenditure represents 2 per cent of the Gross National Product (GNP), but 90 per cent of the expenditure is on operating supplies and maintenance services, with only 10 per cent on major capital equipment orders. Canadian National, for example, spends \$1.4 billion a year for goods and services, of which much is purchased regionally, and of which \$500 million is for capital equipment.

Table 1 shows the approximate capital budget expenditures on major equipment of five of the larger Crown corporations.

**TABLE 1**  
**CAPITAL BUDGET EXPENDITURES ON MAJOR EQUIPMENT (1983)**

<b>Corporation</b>	<b>Expenditures (\$000)</b>
CN Rail	500
Air Canada	350
Petro-Canada	150
VIA Rail	130
Teleglobe Canada	<u>100</u>
<b>TOTAL</b>	<b>1,230</b>

**Source:** 1983 Corporate Annual Reports.

The other 143 Crown corporations have capital expenditures considerably less than \$100 million annually.

Opportunities for industrial benefits (IBs) which can be realistically pursued through Crown corporation procurement can therefore be directed to these large Crown corporations (Table 1), and depending on capital program plans, could include the CBC, Canada Post, and a few others.

Since equipment purchases are focused on a narrow range of sectors, their impact in these sectors can be significant. Table 2 shows that the concentration of Crown corporation procurements is mainly in six industrial sectors with concentration in transportation equipment, petroleum and coal products, and electrical equipment.

Table 2 also shows that imports account for about 60 per cent of procurement in the transportation equipment and machinery sectors, with imported transportation equipment being comprised largely of aircraft and aircraft parts.

**TABLE 2**  
**PROCUREMENTS CONCENTRATION OF FEDERAL CROWN CORPORATION**

Sector	Value (\$000)	Per cent Total	Per cent Imported
Transportation equipment	385,782	28.96	59.10
Petroleum and coal products	258,004	19.37	7.30
Electrical products	145,969	10.96	29.52
Metal fabricating	93,692	7.03	23.58
Machinery	84,692	6.34	61.58
Food and beverage	80,866	6.07	10.56
Sub-total	1,048,802	78.73	-
Other Standard Industry Sectors (14)	283,152	21.27	-
<b>TOTAL</b>	<b>1,331,954</b>	<b>100.00</b>	<b>-</b>

The potential for significantly improving industrial capability by increasing the amount of Canadian content in Crown corporation procurement is not substantial since there is no Canadian supplier of commercial aircraft. However, Crown corporation procurement policy has historically supported Canadian industry (i.e., railway equipment) and the continuing application of such supportive policies is important to Canadian industry and business.

## ASSESSMENT

While the numerous Crown corporations have been set up for a variety of reasons, the underlying management philosophy is that they should operate efficiently and independently from government interference in the provision of services, and where applicable should compete with private sector competitors on an equal footing. In this respect the major Crown corporations are required to comply with regulatory requirements (federal, provincial, or international) in the same way as their private sector counterparts. It is important to sustain this competitive situation if attempts to further commercialize Crown corporations are to be pursued.

The six Crown corporations surveyed all have policies which reflect their role as "good corporate citizens" and because they are publicly owned, they try to be seen as leaders in the application of national objectives. Thus these corporations have included consideration of various socio-economic benefits in their procurement policies and programs. (As an example, refer to Petro-Canada's public statement of procurement policy in Appendix A.)

Crown corporations, however, pursue socio-economic benefits in conjunction with commercial factors, i.e., decisions must make business sense. Thus, premiums may be paid in varying degrees for Canadian content to ensure the development or maintenance of a stable supplier base. Similarly, new technology initiatives are supported when they offer longer-term potential for improvements to operating efficiency or effectiveness.

Petro-Canada, for example, purchased a \$20 million hydrotreating process for its Montreal refinery. The installation will be the first production use of this Canada Centre for Minerals and Energy Technology (CANMET) developed process, and will use heavy-wall pressure vessels manufactured for the first time in Canada (previously all similar pressure vessels have been imported).

In using Crown corporation procurement to support the government's broader objectives for industrial and regional development, Crown corporations should be subject to the same requirements as other corporations and control exercised through regulatory agencies. The development of an offshore petroleum industry support infrastructure on the

east coast or in the Beaufort Sea, for example, is an objective of both oil companies participating in the areas and governments. Coordination of such activity is best done in the context of broader government-company industrial development programs, rather than specifically through procurement programs.

**Conclusion:** Crown corporations pursue industrial and regional development as part of their purchasing plans, consistent with commercial viability constraints. Policy objectives are consistent with and reflect government policy.

## **OPTIONS**

The study team recommends to the Task Force that the government consider undertaking no additional study of Crown corporation procurement policies and practices related to government objectives for industrial and regional development at this time.



**PETRO-CANADA: CORPORATE PROCUREMENT POLICY**

Petro-Canada recognizes that its procurement decisions can play a significant role in developing employment, new business opportunities for Canadian firms, and a more proficient supply community for the corporation. The corporation will favour regional Canadian sources that can meet Petro-Canada's requirements by providing security of supply and technical acceptability on a sound commercial basis. The corporation will undertake to make its bidding process as accessible as practical to local suppliers. In its procurement of materials and services the corporation, as a matter of routine, will also undertake an intensive evaluation of:

- value added in Canada, in general, and in the region of resource development in particular;
- the potential of the supply firm to satisfy the requirements of the corporation and upgrade regional and national industrial capability; and
- in circumstances which clearly dictate procurement from an offshore source, Petro-Canada will endeavour to use its purchasing power effectively to secure maximum technological, managerial, and employment benefits for the corporation and for Canada.

## **COOPERATIVE FEDERAL-PROVINCIAL PROCUREMENT**

### **PURPOSE**

To examine methods to promote greater cooperation among federal, provincial and municipal governments and their Crown corporations in the areas of sourcing and sharing of procurement information in order to a) achieve greater economies; and b) promote industrial development.

### **BACKGROUND**

Canada's limited domestic market is too small to support many manufacturers of products consumed by governments.

The various levels of government in Canada spend some \$60 billion per year on goods and services. A significant portion of this expenditure is accounted for by imports, with the balance provided from often highly fragmented domestic supply sources. At the federal level, of the several billions of dollars in procurement expenditures by the Department of Supply and Services (DSS), 80 per cent goes to Canadian-based firms but close to half of the content of these purchases is imported in turn.

### **ASSESSMENT**

The principle of cooperation in the procurement of goods and services is well established as a useful way to achieve economies and promote industrial development. For example, procurement of drugs through the Cooperative Drug Bulk Purchase Program has yielded significant savings for participating governments; and recent joint purchase of CL-215 waterbombers by the two levels of government has resulted in improved fire protection for a valuable resource, saved money and preserved an important technology for Canada.

Capturing the potential benefits from coordinated public sector procurements requires that governments be involved on a more continuing basis in this process and that a broader range of commodities be subjected to deeper analysis.

All levels of government are major purchasers of products such as medical instruments, laboratory equipment and scientific instruments, communications equipment, electronics systems integration, police requirements and

third party maintenance of equipment. Establishment of some form of intergovernmental committee for cooperative purchasing would contribute significantly to enhanced intergovernmental cooperation in the procurement of such products.

Two variants of this approach have been proposed in the last five years. In 1980, the federal government proposed, at a Federal-Provincial Conference of Ministers and Deputy Ministers of Public Works, Supply and Government Services, that a National Cooperative Supply Agency (NCSA) be established. This agency was to be jointly owned and operated and would identify, market and implement amalgamated public sector procurements.

Subsequently, Ontario proposed the establishment of a Canadian Market Development Agency to better coordinate federal, provincial and municipal procurements. Ontario estimated that about 70 per cent of the medical and health care products with a total value of approximately \$1.2 billion purchased by governments were imported and argued that recapturing only 20 per cent of this market would result in an additional \$240 million in domestic sales, along with new jobs and regional development opportunities.

Other provinces argued that establishment of a Canadian Market Development Agency would result in the centralization of procurement decisions and these latter views prevailed. Opinion on this problem seems to be shifting, an example of which is the view put forth by the Canada West Foundation in its 1985 study on interprovincial barriers to trade, which stated that restrictive procurement policies are among those barriers that limit free trade within Canada. To alleviate this concern, it is suggested that any intergovernmental cooperation be pursued by an advisory body, with a primary function of providing information.

The mandate of such a cooperative procurement advisory body would be:

- to gather and disseminate data on public sector procurement, standards and specifications, and source lists;
- to identify potential cost savings from joint purchasing and potential sources of supply by sector and product area. Results of these investigations would be circulated for consideration and action where appropriate;

- to provide an appropriate link for parties interested in joint supply, and to serve on a case-by-case basis as a project office for such joint procurements; and
- to be a vehicle to harmonize policies in government procurement and seek cooperative solutions to common problems.

Related staffing and financing issues would be addressed by participants. It is expected that federal participation would come from DSS as well as the Department of Regional Industrial Expansion. Some costs should be recoverable through the sale of research findings and other data. Direction of the advisory body would be rotated among the participating members.

Some steps have already been taken to effect closer relations with provincial governments. Memoranda of Understanding (MOU) setting a general framework for cooperation have been signed with seven provinces: British Columbia, Saskatchewan, Ontario, New Brunswick, Prince Edward Island, Nova Scotia and Newfoundland.

The recently completed consultations for the Annual Procurement Plan and Strategy (APPS) of DSS involving all ten provincial governments resulted in a resolution that more concerted action was required. The Annual Procurement Plan and Strategy for 1985-86 to 1988-89 proposed that individual "action plans" be developed for each province based on their designation of areas of mutual benefit. They range from jointly sponsored "How to do Business with Government" seminars and exchanges of personnel, to cooperative sales of surplus assets and information sharing on sourcing methods and systems.

The DSS publication entitled "The Size and Structure of the Public Sector Market" (a study commissioned jointly by DSS, some provinces and DRIE) has revealed significant information about the public sector market. It is now in need of update and all provincial governments are being asked to contribute.

Conclusions: These initiatives should be endorsed and encouraged further. Steps should be taken to sign Memoranda of Understanding with the remaining provinces. This should be seen, however, as the beginning of the exercise rather than the end.



As experience is gained with the working of the Memoranda of Understanding and action plans, further efforts should be made to expand the scope of federal-provincial cooperation in the procurement process. The advisory body proposed is an effective method of addressing a major common issue in industrial and regional development. It also provides an opportunity to analyze the true potential for savings to the treasuries of all levels of government, at a time of serious budget constraints, while at the same time respecting both the spirit and the letter of the government's international undertaking in matters of trade and procurement.

## **OPTIONS**

The study team recommends to the Task Force that the government consider establishing a federal-provincial advisory body for cooperative procurement to:

1. gather and disseminate information on public sector procurement, standards and specifications, and source lists;
2. undertake analysis, by sector and product area, to identify potential cost savings from joint purchasing opportunities and potential sources of supply.

## **RECORD OF CONSULTATION**

Members of the study team on procurement conducted interviews with a large number of senior federal government personnel in Ottawa and regionally, as well as representatives of various industry associations, private sector companies, Crown corporations, and private individuals. (For purposes of conciseness, the following list does not contain the names of all people interviewed in each organization.)

### **Federal Government Departments and Agencies**

#### **Agriculture**

Mr. B.A. McKinnon  
Director General

#### **Canadian International Development Agency**

Mr. P.J. Haines  
Vice-President

Mr. D Holdsworth  
Director General

#### **Communications**

Dr. C.A. Franklin  
Director General

Mr. G. Henter  
Director General

Mr. P. Liebel  
Director General

#### **Correctional Service**

Mr. J.P. Cadieux  
Deputy Commissioner

#### **Crown Assets Disposal Corporation**

Mr. P. Lefebvre  
President

## **Employment and Immigration**

Mr. H. Braiter  
Director General

Mr. E. Davis  
Director General

## **Energy, Mines and Resources**

Mr. S. Mensforth  
Assistant Deputy Minister

Mr. K. Whitham  
Assistant Deputy Minister

## **Environment**

Dr. D.M. Brown  
Director General

## **External Affairs**

Mr. G. Smith  
Deputy Minister

Mr. D. Burney  
Assistant Deputy Minister

Mr. A. Kilpatrick  
Assistant Deputy Minister

Mr. D. Bresnahan  
Director General

Mr. T. Chell  
Director General

Mr. K. Plowman  
Director General

## **Health and Welfare**

Mr. G. Berger  
Federal Coordinator  
Olympic Office

Mr. K.F. McCarthy  
Director General

## **Justice**

Reg. L. Evans  
Assistant Deputy Minister

## **Ministry of State for Science and Technology**

Mr. R. Gaultieri  
Deputy Secretary

## **National Defence**

VAdm D. Mainguy  
Vice Chief of the Defence Staff

LGen F. Richard  
Deputy Chief of the Defence Staff

Mr. J. Killick  
Assistant Deputy Minister

MGen. G. MacFarlane  
Associate Assistant Deputy Minister

RAdm E. Healey  
Chief

Mr. R. Hutchinson  
Chief

Mr. M.E. Matusiak  
Chief

Dr. D.F. Scholfield  
Chief

Cmdre J. Green  
Project Manager

BGen B.G. Harrison  
Director General

Mr. D. Hines  
Director General



## **National Research Council**

Mr. B. Leddy  
Vice-President

Dr. J.K. Pulfer  
Vice-President

Dr. C. Willis  
Secretary General

## **Auditor General**

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Assistant Auditor General

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Assistant Secretary to the Cabinet

Mr. H. Swain  
Assistant Secretary to the Cabinet

Mr. S. Rosell  
Executive Director

## **Public Service Commission**

Mr. J.A. St-Aubin  
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Assistant Deputy Minister

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Director General

Mr. G. Chaisson  
Director General

Mr. D.P. DeMelto  
Director General

Mr. C. Oliver  
Comptroller

**Revenue Canada - Taxation**

Mr. H. Lagasse  
Director General

**Restrictive Trade Practices Commission of Canada**

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Chairman

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Under Secretary of State

Mr. A. Landry  
Assistant Under Secretary of State

Mr. P. Gawn  
Director General

Mr. M. Tsui  
Director General

**Solicitor General**

Mr. M. Zelman  
Senior Advisor

**Statistics Canada**

Mr. E. Outrata  
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Deputy Minister

Mr. H.H. Floyd  
Assistant Deputy Minister

Mr. P. Lefebvre  
Assistant Deputy Minister

Mr. P. Smith  
Assistant Deputy Minister

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Director General

Mr. B.T. Boyd  
Director General

Mr. G.J. Brown  
Director General

Mr. G. Chadwell  
Director General

Mr. P. Comeau  
Director General

Mr. P.C. Connolly  
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Mr. J.N. Courtney  
Director General

Mr. J. Hammond  
Director General

Mr. S.R. Kerr  
Director General

Mr. N. Manchevsky  
Director General

Mr. J. Murray  
Comptroller

Mr. R.A. Sweetman  
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Mr. H. Webster  
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Administrator

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Mr. J.J. Noreau  
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Mr. G. Glashan  
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Mr. J. McCrindell  
Assistant Comptroller General

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Chairman, Common Services Review Board

Mr. J.R. Thivierge  
Assistant Secretary

Mr. C. Guruprasad  
Vice Chairman - Task Force on Informatics

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**CONSULTATION WITH OTHER FEDERAL GOVERNMENT  
DEPARTMENTS AND PRIVATE INDUSTRIES**

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Supply and Services

Mr. B.M. McLean  
Supply and Services

Mr. J.A. Quigley  
Department of Communications

Mr. C.C. Townslager  
Supply and Services

Mr. M.R. Tupper  
Public Works

**EDMONTON**

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Employment and Immigration

Mr. K. Johnston  
Public Works

Mr. P. McGee  
Federal Economic Development Coordinator

Mr. I. Nystad  
Employment and Immigration

Mr. T. Simper  
Supply and Services

Mr. C. Tainsh  
Supply and Services

**REGINA**

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Indian and Northern Affairs

Mr. P.R. Sherhols  
Federal Economic Development Coordinator

Mr. T. Simper  
Supply and Services

Mr. H. Wolfe  
Prairie Farm Rehabilitation Administration  
Agriculture Canada

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National Defence (Lab.)

Mr. R.F. Brown  
National Defence (Lab.)

Mr. J. Hammond  
Supply and Services

Mr. W. Harper  
National Defence

Mr. J. Hiscott  
Transport (Coast Guard)

Mr. T. Ivanko  
National Defence

Mr. A.J. Lapierre  
Transport (Coast Guard)

Mr. R. Lavoie  
Fisheries and Oceans (Research)

Mr. J.D. Murray  
National Defence

Mr. D. Robson  
National Research Council

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Fisheries and Oceans

Mr. R. Hayward  
Federal Economic Development Coordinator

Mr. R. Hyslop  
Transport (Coast Guard)

Mr. F. Porter  
Fisheries and Oceans

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Mr. C.S. Hutchings  
British Columbia Purchasing Commission

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Benwell Atkins

Mr. M. Burbank  
CTF Systems

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MacLean Plansearch Corporation

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Jones Tent and Awning Ltd.

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Canada Post Corporation  
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Office of Federal Procurement Policy

Mrs. M. Gilleece  
Deputy Undersecretary of  
Defence (Acquisition)(D.O.D.)

Mr. W. Wittig  
Office of Contract Policy and  
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Mr. R. Donnelly  
Director Industrial Research (D.O.D.)

Mr. A. Tucker  
Deputy Assistant Inspector General for  
Auditing (D.O.D.)

Mr. A. Beres  
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Acquisition Policy  
General Services Administration

Mr. T. Davis  
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Office of Information Resources  
General Services Administration

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Associate Director  
General Accounting Office

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Chief Investigator, Government  
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Coopers and Lybrand  
Crowntek Sales Inc. (Toronto)  
DMR and Associates  
Garrett Manufacturing Ltd.  
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Goodman and Goodman (Toronto)  
HTS Hi Tech Systems Limited (Vancouver)  
Hydro Quebec  
Investissements Elmag Ltée.  
Ontario Hydro  
Ottawa University  
Raytheon Company  
Royal Bank of Canada  
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Aerospace Industries Association of Canada  
Air Industries Association of Canada  
Canadian Advanced Technology Association  
Canadian Business Equipment Manufacturers  
Association  
Canadian Export Association  
Canadian Manufacturers Association  
Canadian Shipbuilding and Ship Repairing  
Association  
Electrical and Electronic Manufacturers  
Association of Canada  
Machinery and Equipment Manufacturers  
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Mr. A. Bailey  
Mr. G.A. Berger  
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Canadian Federation of Labour



















